11. Personality:

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**Personality psychology**

Personality psychology is a branch of psychology that studies personality and individual differences. Its areas of focus include:

Constructing a coherent picture of a person and his or her major psychological processes
Investigating individual differences, that is, how people can differ from one another
Investigating human nature, that is, how all people’s behavior is similar

"Personality" can be defined as a dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviors in various situations. The word "personality" originates from the Latin persona, which means mask. Significantly, in the theatre of the ancient Latin-speaking world, the mask was not used as a plot device to disguise the identity of a character, but rather was a convention employed to represent or typify that character.

The pioneering American psychologist Gordon Allport (1937) described two major ways to study personality: the nomothetic and the idiographic. Nomothetic psychology seeks general laws that can be applied to many different people, such as the principle of self-actualization, or the trait of extraversion. Idiographic psychology is an attempt to understand the unique aspects of a particular individual.

The study of personality has a broad and varied history in psychology, with an abundance of theoretical traditions. The major theories include dispositional (trait) perspective, psychodynamic, humanistic, biological, behaviorist and social learning perspective. There is no consensus on the definition of "personality" in psychology. Most researchers and psychologists do not explicitly identify themselves with a certain perspective and often take an eclectic approach. Some research is empirically driven such as the "Big 5" personality model whereas other research emphasizes theory development such as psychodynamics. There is also a substantial emphasis on the applied field of personality testing. In psychological education and training, the study of the nature of personality and its psychological development is usually reviewed as a prerequisite to courses in abnormal or clinical psychology.

**Philosophical assumptions**

Many of the ideas developed by historical and modern personality theorists stem from the basic philosophical assumptions they hold. The study of personality is not a purely empirical discipline, as it brings in elements of art, science, and philosophy to draw general conclusions. The following five categories are some of the most fundamental philosophical assumptions on which theorists disagree:

1. **Freedom versus Determinism**
This is the debate over whether we have control over our own behavior and understand the motives behind it (Freedom), or if our behavior is causally determined by forces beyond our control (Determinism). Determinism has been considered unconscious, environmental, or biological by various theories.

2. Heredity versus Environment

Personality is thought to be determined largely by genetics and biology, by environment and experiences, or by some combination resulting thereof. There is evidence for all possibilities. Contemporary research suggests that most personality traits are based on the joint influence of genetics and environment. One of the forerunners in this arena is C. Robert Cloninger with the Temperament and Character model.

3. Uniqueness versus Universality

The argument over whether we are all unique individuals (Uniqueness) or if humans are basically similar in their nature (Universality). Gordon Allport, Abraham Maslow, and Carl Rogers were all advocates of the uniqueness of individuals. Behaviorists and cognitive theorists, in contrast, emphasized the importance of universal principles such as reinforcement and self-efficacy.

4. Active versus Reactive

Do we primarily act through our own initiative (Active), or react to outside stimuli (Reactive)? Behavioral theorists typically believe that humans are passively shaped by their environments, whereas humanistic and cognitive theorists believe that humans are more active.

5. Optimistic versus Pessimistic

Personality theories differ on whether people can change their personalities (Optimism), or if they are doomed to remain the same throughout their lives (Pessimism). Theories that place a great deal of emphasis on learning are often, but not always, more optimistic than theories that do not emphasize learning.

**Personality theories**

Critics of personality theory claim personality is "plastic" across time, places, moods, and situations. Changes in personality may indeed result from diet (or lack thereof), medical effects, significant events, or learning. However, most personality theories emphasize stability over fluctuation. The definition of personality that is most widely supported to date is attributed to the neurologist Paul Roe. He stated personality to be "an individual's predisposition to think certain patterns of thought, and therefore engage in certain patterns of behaviour."
Trait theories

According to the Diagnostic and Statistical Manual of the American Psychiatric Association, personality traits are "enduring patterns of perceiving, relating to, and thinking about the environment and oneself that are exhibited in a wide range of social and personal contexts." Theorists generally assume a) traits are relatively stable over time, b) traits differ among individuals (e.g. some people are outgoing while others are reserved), and c) traits influence behavior.

The most common models of traits incorporate three to five broad dimensions or factors. The least controversial dimension, observed as far back as the ancient Greeks, is simply extraversion and introversion (outgoing and physical-stimulation-oriented vs. quiet and physical-stimulation-averse).

Gordon Allport delineated different kinds of traits, which he also called dispositions. Central traits are basic to an individual's personality, while secondary traits are more peripheral. Common traits are those recognized within a culture and thus may vary from culture to culture. Cardinal traits are those by which an individual may be strongly recognized.

Raymond Cattell's research propagated a two-tiered personality structure with sixteen "primary factors" (16 Personality Factors) and five "secondary factors."

Hans Eysenck believed just three traits—extraversion, neuroticism and psychoticism—were sufficient to describe human personality. Differences between Cattell and Eysenck emerged due to preferences for different forms of factor analysis, with Cattell using oblique, Eysenck orthogonal rotation to analyse the factors that emerged when personality questionnaires were subjected to statistical analysis. Today, the Big Five factors have the weight of a considerable amount of empirical research behind them, building on the work of Cattell and others.

Lewis Goldberg proposed a five-dimension personality model, nicknamed the "Big Five":

- Openness to Experience: the tendency to be imaginative, independent, and interested in variety vs. practical, conforming, and interested in routine.
- Conscientiousness: the tendency to be organized, careful, and disciplined vs. disorganized, careless, and impulsive.
- Extraversion: the tendency to be sociable, fun-loving, and affectionate vs. retiring, somber, and reserved.
- Agreeableness: the tendency to be softhearted, trusting, and helpful vs. ruthless, suspicious, and uncooperative.
- Neuroticism: the tendency to be calm, secure, and self-satisfied vs. anxious, insecure, and self-pitying.

The Big Five contain important dimensions of personality. However, some personality researchers argue that this list of major traits is not exhaustive. Some support has been
found for two additional factors: excellent/ordinary and evil/decent. However, no definitive conclusions have been established.

John L. Holland’s RIASEC vocational model, commonly referred to as the Holland Codes, stipulates that six personality traits lead people to choose their career paths. In this circumplex model, the six types are represented as a hexagon, with adjacent types more closely related than those more distant. The model is widely used in vocational counseling.

Trait models have been criticized as being purely descriptive and offering little explanation of the underlying causes of personality. Eysenck’s theory, however, does propose biological mechanisms as driving traits, and modern behavior genetics researchers have shown a clear genetic substrate to them. Another potential weakness of trait theories is that they may lead some people to accept oversimplified classifications—or worse, offer advice—based on a superficial analysis of personality. Finally, trait models often underestimate the effect of specific situations on people’s behavior. It is important to remember that traits are statistical generalizations that do not always correspond to an individual’s behavior.

Type theories

Personality type refers to the psychological classification of different types of people. Personality types are distinguished from personality traits, which come in different levels or degrees. For example, according to type theories, there are two types of people, introverts and extraverts. According to trait theories, introversion and extraversion are part of a continuous dimension, with many people in the middle. The idea of psychological types originated in the theoretical work of Carl Jung and William Marston, whose work is reviewed in Dr. Travis Bradberry’s Self-Awareness. Jung’s seminal 1921 book on the subject is available in English as Psychological Types.

Building on the writings and observations of Jung, during World War II, Isabel Briggs Myers and her mother, Katharine C. Briggs, delineated personality types by constructing the Myers-Briggs Type Indicator. This model was later used by David Keirsey with a different understanding from Jung, Briggs and Myers. In the former Soviet Union, Lithuanian Aušra Augustinavičiūtė independently derived a model of personality type from Jung’s called Socionics.

The model is an older and more theoretical approach to personality, accepting extraversion and introversion as basic psychological orientations in connection with two pairs of psychological functions:

- Perceiving functions: sensing and intuition (trust in concrete, sensory-oriented facts vs. trust in abstract concepts and imagined possibilities).
- Judging functions: thinking and feeling (basing decisions primarily on logic vs. considering the effect on people).

Briggs and Myers also added another personality dimension to their type indicator to measure whether a person prefers to use a judging or perceiving function when interacting
with the external world. Therefore they included questions designed to indicate whether someone wishes to come to conclusions (judgment) or to keep options open (perception).

This personality typology has some aspects of a trait theory: it explains people’s behaviour in terms of opposite fixed characteristics. In these more traditional models, the sensing/intuition preference is considered the most basic, dividing people into "N" (intuitive) or "S" (sensing) personality types. An "N" is further assumed to be guided either by thinking or feeling, and divided into the "NT" (scientist, engineer) or "NF" (author, humanitarian) temperament. An "S", by contrast, is assumed to be guided more by the judgment/perception axis, and thus divided into the "SJ" (guardian, traditionalist) or "SP" (performer, artisan) temperament. These four are considered basic, with the other two factors in each case (including always extraversion/introversion) less important. Critics of this traditional view have observed that the types can be quite strongly stereotyped by professions (although neither Myers nor Keirsey engaged in such stereotyping in their type descriptions), and thus may arise more from the need to categorize people for purposes of guiding their career choice. This among other objections led to the emergence of the five-factor view, which is less concerned with behavior under work conditions and more concerned with behavior in personal and emotional circumstances. (It should be noted, however, that the MBTI is not designed to measure the "work self", but rather what Myers and McCaulley called the "shoes-off self.") Some critics have argued for more or fewer dimensions while others have proposed entirely different theories (often assuming different definitions of "personality").

Type A and Type B personality theory: During the 1950s, Meyer Friedman and his co-workers defined what they called Type A and Type B behavior patterns. They theorized that intense, hard-driving Type A personalities had a higher risk of coronary disease because they are "stress junkies." Type B people, on the other hand, tended to be relaxed, less competitive, and lower in risk. There was also a Type AB mixed profile.

Psychoanalytic theories

Psychoanalytic theories explain human behaviour in terms of the interaction of various components of personality. Sigmund Freud was the founder of this school. Freud drew on the physics of his day (thermodynamics) to coin the term psychodynamics. Based on the idea of converting heat into mechanical energy, he proposed psychic energy could be converted into behavior. Freud's theory places central importance on dynamic, unconscious psychological conflicts.

Freud divides human personality into three significant components: the id, ego, and superego. The id acts according to the pleasure principle, demanding immediate gratification of its needs regardless of external environment; the ego then must emerge in order to realistically meet the wishes and demands of the id in accordance with the outside world, adhering to the reality principle. Finally, the superego (conscience) inculcates moral judgment and societal rules upon the ego, thus forcing the demands of the id to be met not only realistically but morally. The superego is the last function of the personality to develop, and is the embodiment of parental/social ideals established during childhood.
According to Freud, personality is based on the dynamic interactions of these three components.

The channeling and release of sexual (libidinal) and aggressive energies, which ensues from the "Eros" (sex; instinctual self-preservation) and "Thanatos" (death; instinctual self-annihilation) drives respectively, are major components of his theory. It is important to note that Freud's broad understanding of sexuality included all kinds of pleasurable feelings experienced by the human body.

Freud proposed five psychosexual stages of personality development. He believed adult personality is dependent upon early childhood experiences and largely determined by age five. Fixations that develop during the Infantile stage contribute to adult personality and behavior.

One of Sigmund Freud's earlier associates, Alfred Adler, did agree with Freud early childhood experiences are important to development, and believed birth order may influence personality development. Adler believed the oldest was the one that set high goals to achieve to get the attention they lost back when the younger siblings were born. He believed the middle children were competitive and ambitious possibly so they are able to surpass the first-born's achievements, but were not as much concerned about the glory. He also believed the last born would be more dependent and sociable but be the baby. He also believed that the only child loves being the center of attention and matures quickly, but in the end fails to become independent.

Heinz Kohut thought similarly to Freud's idea of transference. He used narcissism as a model of how we develop our sense of self. Narcissism is the exaggerated sense of one self in which is believed to exist in order to protect one's self-esteem and sense of worthlessness. Kohut had a significant impact on the field by extending Freud's theory of narcissism and introducing what he called the 'self-object transferences' of mirroring and idealization. In other words, children need to idealize and emotionally "sink into" and identify with the idealized competence of admired figures such as parents or older siblings. They also need to have their self-worth mirrored by these people. These experiences allow them to thereby learn the self-soothing and other skills that are necessary for the development of a healthy sense of self.

Another important figure in the world of personality theory was Karen Horney. She is credited with the development of the "real self" and the "ideal self". She believes all people have these two views of their own self. The "real self" is how you really are with regards to personality, values, and morals; but the "ideal self" is a construct you apply to yourself to conform to social and personal norms and goals. Ideal self would be "I can be successful, I am CEO material"; and real self would be "I just work in the mail room, with not much chance of high promotion".

**Behaviorist theories**
Behaviorists explain personality in terms of the effects external stimuli have on behavior. It was a radical shift away from Freudian philosophy. This school of thought was developed by B. F. Skinner who put forth a model which emphasized the mutual interaction of the person or "the organism" with its environment. Skinner believed children do bad things because the behavior obtains attention that serves as a reinforcer. For example: a child cries because the child’s crying in the past has led to attention. These are the response, and consequences. The response is the child crying, and the attention that child gets is the reinforcing consequence. According to this theory, people's behavior is formed by processes such as operant conditioning. Skinner put forward a "three term contingency model" which helped promote analysis of behavior based on the "Stimulus - Response - Consequence Model" in which the critical question is: "Under which circumstances or antecedent 'stimuli' does the organism engage in a particular behavior or 'response', which in turn produces a particular 'consequence'?

Richard Herrnstein extended this theory by accounting for attitudes and traits. An attitude develops as the response strength (the tendency to respond) in the presences of a group of stimuli become stable. Rather than describing conditionable traits in non-behavioral language, response strength in a given situation accounts for the environmental portion. Herrnstein also saw traits as having a large genetic or biological component as do most modern behaviorists.

Ivan Pavlov is another notable influence. He is well known for his classical conditioning experiments involving dogs. These physiological studies led him to discover the foundation of behaviorism as well as classical conditioning.

**Social cognitive theories**

In cognitive theory, behavior is explained as guided by cognitions (e.g. expectations) about the world, especially those about other people. Cognitive theories are theories of personality that emphasize cognitive processes such as thinking and judging.

Albert Bandura, a social learning theorist suggested the forces of memory and emotions worked in conjunction with environmental influences. Bandura was known mostly for his "Bobo Doll experiment". During these experiments, Bandura video taped a college student kicking and verbally abusing a bobo doll. He then showed this video to a class of kindergarten children who were getting ready to go out to play. When they entered the play room, they saw bobo dolls, and some hammers. The people observing these children at play saw a group of children beating the doll. He called this study and his findings observational learning, or modeling.

Early examples of approaches to cognitive style are listed by Baron (1982). These include Witkin's (1965) work on field dependency, Gardner's (1953) discovering people had consistent preference for the number of categories they used to categorise heterogeneous objects, and Block and Petersen's (1955) work on confidence in line discrimination judgments. Baron relates early development of cognitive approaches of personality to ego psychology. More central to this field have been:
Self-efficacy work, dealing with confidence people have in abilities to do tasks;

Locus of control theory dealing with different beliefs people have about whether their worlds are controlled by themselves or external factors;

Attributional style theory dealing with different ways in which people explain events in their lives. This approach builds upon locus of control, but extends it by stating we also need to consider whether people attribute to stable causes or variable causes, and to global causes or specific causes.

Various scales have been developed to assess both attributional style and locus of control. Locus of control scales include those used by Rotter and later by Duttweiler, the Nowicki and Strickland (1973) Locus of Control Scale for Children and various locus of control scales specifically in the health domain, most famously that of Kenneth Wallston and his colleagues, The Multidimensional Health Locus of Control Scale. Attributional style has been assessed by the Attributional Style Questionnaire, the Expanded Attributional Style Questionnaire, the Attributions Questionnaire, the Real Events Attributional Style Questionnaire and the Attributional Style Assessment Test.

Walter Mischel (1999) has also defended a cognitive approach to personality. His work refers to "Cognitive Affective Units", and considers factors such as encoding of stimuli, affect, goal-setting, and self-regulatory beliefs. The term "Cognitive Affective Units" shows how his approach considers affect as well as cognition.

Personal Construct Psychology (PCP) is a theory of personality developed by the American psychologist George Kelly in the 1950s. From the theory, Kelly derived a psychotherapy approach and also a technique called The Repertory Grid Interview that helped his patients to uncover their own "constructs" (defined later) with minimal intervention or interpretation by the therapist. The Repertory Grid was later adapted for various uses within organizations, including decision-making and interpretation of other people's world-views. From his 1963 book, A Theory of Personality, pp. 103–104:

- Fundamental Postulate: A person's processes are psychologically channelized by the ways in which the person anticipates events.
- Construction Corollary: A person anticipates events by construing their replications.
- Individuality Corollary: People differ from one another in their construction of events.
- Organization Corollary: Each person characteristically evolves, for convenience in anticipating events, a construction system embracing ordinal relationships between constructs.
- Dichotomy Corollary: A person's construction system is composed of a finite number of dichotomous constructs.
- Choice Corollary: People choose for themselves the particular alternative in a dichotomized construct through which they anticipate the greater possibility for extension and definition of their system.
- Range Corollary: A construct is convenient for the anticipation of a finite range of events only.
- Experience Corollary: A person's construction system varies as the person successively construes the replication of events.
- Modulation Corollary: The variation in a person's construction system is limited by the permeability of the constructs within whose ranges of conveniences the variants lie.
- Fragmentation Corollary: A person may successively employ a variety of construction subsystems which are inferentially incompatible with each other.
- Commonality Corollary: To the extent that one person employs a construction of experience which is similar to that employed by another, the psychological processes of the two individuals are similar to each other.
- Sociality Corollary: To the extent that one person construes another's construction processes, that person may play a role in a social process involving the other person.

**Humanistic theories**

In humanistic psychology it is emphasized people have free will and they play an active role in determining how they behave. Accordingly, humanistic psychology focuses on subjective experiences of persons as opposed to forced, definitive factors that determine behavior. Abraham Maslow and Carl Rogers were proponents of this view, which is based on the "phenomenal field" theory of Combs and Snygg (1949).

Maslow spent much of his time studying what he called "self-actualizing persons", those who are "fulfilling themselves and doing the best they are capable of doing". Maslow believes all who are interested in growth move towards self-actualizing (growth, happiness, satisfaction) views. Many of these people demonstrate a trend in dimensions of their personalities. Characteristics of self-actualizers according to Maslow include the four key dimensions:

- Awareness - maintaining constant enjoyment and awe of life. These individuals often experienced a "peak experience". He defined a peak experience as an "intensification of any experience to the degree there is a loss or transcendence of self". A peak experience is one in which an individual perceives an expansion of his or herself, and detects a unity and meaningfulness in life. Intense concentration on an activity one is involved in, such as running a marathon, may invoke a peak experience.
- Reality and problem centered - they have tendency to be concerned with "problems" in their surroundings.
- Acceptance/Spontaneity - they accept their surroundings and what cannot be changed.
- Unhostile sense of humor/democratic - they do not like joking about others, which can be viewed as offensive. They have friends of all backgrounds and religions and hold very close friendships.
Maslow and Rogers emphasized a view of the person as an active, creative, experiencing human being who lives in the present and subjectively responds to current perceptions, relationships, and encounters. They disagree with the dark, pessimistic outlook of those in the Freudian psychoanalysis ranks, but rather view humanistic theories as positive and optimistic proposals which stress the tendency of the human personality toward growth and self-actualization. This progressing self will remain the center of its constantly changing world; a world that will help mold the self but not necessarily confine it. Rather, the self has opportunity for maturation based on its encounters with this world. This understanding attempts to reduce the acceptance of hopeless redundancy. Humanistic therapy typically relies on the client for information of the past and its effect on the present, therefore the client dictates the type of guidance the therapist may initiate. This allows for an individualized approach to therapy. Rogers found patients differ in how they respond to other people. Rogers tried to model a particular approach to therapy— he stressed the reflective or empathetic response. This response type takes the client’s viewpoint and reflects back his or her feeling and the context for it. An example of a reflective response would be, "It seems you are feeling anxious about your upcoming marriage". This response type seeks to clarify the therapist’s understanding while also encouraging the client to think more deeply and seek to fully understand the feelings they have expressed.

**Biopsychological theories**

Some of the earliest thinking about possible biological bases of personality grew out of the case of Phineas Gage. In an 1848 accident, a large iron rod was driven through Gage’s head, and his personality apparently changed as a result (although descriptions of these psychological changes are usually exaggerated — see the article on Gage).

In general, patients with brain damage have been difficult to find and study. In the 1990s, researchers began to use Electroencephalography (EEG), Positron Emission Tomography (PET) and more recently functional Magnetic Resonance Imaging (fMRI), which is now the most widely used imaging technique to help localize personality traits in the brain. One of the founders of this area of brain research is Richard Davidson of the University of Wisconsin–Madison. Davidson’s research lab has focused on the role of the prefrontal cortex (PFC) and amygdala in manifesting human personality. In particular, this research has looked at hemispheric asymmetry of activity in these regions. Neuropsychological experiments have suggested that hemispheric asymmetry can affect an individual’s personality (particularly in social settings) for individuals with NLD (non-verbal learning disorder), which is marked by the impairment of nonverbal information controlled by the right hemisphere of the brain. Progress will arise in the areas of gross motor skills, inability to organize visual-spatial relations, or adapt to novel social situations. Frequently, a person with NLD is unable to interpret non-verbal cues and therefore experiences difficulty interacting with peers in socially normative ways.

One integrative, biopsychosocial approach to personality and psychopathology, linking brain and environmental factors to specific types of activity, is the hypostatic model of personality, created by Codrin Stefan Tapu.
**Personality tests**

There are two major types of personality tests. Projective tests assume personality is primarily unconscious and assess an individual by how he or she responds to an ambiguous stimulus, like an ink blot. The idea is unconscious needs will come out in the person's response, e.g. an aggressive person may see images of destruction. Objective tests assume personality is consciously accessible and measure it by self-report questionnaires. Research on psychological assessment has generally found objective tests are more valid and reliable than projective tests.

Examples of personality tests include:

- Forte Communication Style Profile
- Holland Codes
- Keirsey Temperament Sorter
- Kelly’s Repertory Grid
- Minnesota Multiphasic Personality Inventory
- Morrisby Profile
- Myers-Briggs Type Indicator
- NEO PI-R
- Personality Assessment Inventory
- ProScan Survey by PDP
- Rorschach test
- Thematic Apperception Test

Critics have pointed to the Forer effect to suggest some of these appear to be more accurate and discriminating than they really are.

**Personality and inner experience**

Psychology has traditionally defined personality through behavioral patterns, and more recently with neuroscientific study of the brain. In recent years, some psychologists have turned to the study of inner experiences for insight into personality and individuality. Russel Hurlburt, a psychologist at the University of Nevada, Las Vegas has studied personality by having individuals record their individual experiences at random times throughout the day. In analyzing the mental freeze-frames that his subjects report, he has found significant variation in inner mental life, and several correlations with behavioral patterns.
Psychoanalytical Approach to Personality

Psychoanalysis

Psychoanalysis is a psychological theory developed in the late 19th and early 20th centuries by Austrian neurologist Sigmund Freud. Psychoanalysis expanded, criticized and developed in different directions, mostly by some of Freud’s former students, such as Alfred Adler and Carl Gustav Jung, and later by neo-Freudians such as Erich Fromm, Karen Horney and Harry Stack Sullivan.

The basic tenets of psychoanalysis include the following:

- human behavior is largely determined by irrational drives;
- those drives are largely not conscious;
- attempt to bring those drives into awareness meets defense (resistance) in many different forms;
- beside the inherited constitution of personality, one’s development is determined by events in early childhood;
- conflicts between conscious view of reality and unconscious (repressed) material can result in mental disturbances such as neurosis, neurotic traits, anxiety, depression etc.;
- the liberation from the effects of the unconscious material is achieved through bringing this material into the consciousness (via e.g. skilled guidance).

Under the broad umbrella of psychoanalysis there are at least 22 theoretical orientations regarding human mental development. The various approaches in treatment called "psychoanalysis" vary as much as the theories do. The term also refers to a method of studying child development.

Freudian psychoanalysis refers to a specific type of treatment in which the "analysand" (analytic patient) verbalizes thoughts, including free associations, fantasies, and dreams, from which the analyst induces the unconscious conflicts causing the patient’s symptoms and character problems, and interprets them for the patient to create insight for resolution of the problems.

The specifics of the analyst’s interventions typically include confronting and clarifying the patient’s pathological defenses, wishes and guilt. Through the analysis of conflicts, including those contributing to resistance and those involving transference onto the analyst of distorted reactions, psychoanalytic treatment can hypothesize how patients unconsciously are their own worst enemies; how unconscious, symbolic reactions that have been stimulated by experience are causing symptoms.

History
During Freud's life, he was greatly respected by his followers and, among them, had great authority as to what constituted psychoanalysis. To some extent, after his death, his authority passed to his youngest daughter, Anna Freud, who during her lifetime, controlled access to his papers.

1890s

The idea of psychoanalysis was developed in Vienna in the 1890s by Sigmund Freud, a neurologist interested in finding an effective treatment for patients with neurotic or hysterical symptoms. Freud had become aware of the existence of mental processes that were not conscious as a result of his neurological consulting job at the Children's Hospital, where he noticed that many aphasic children had no apparent organic cause for their symptoms. He then wrote a monograph about this subject. In the late 1880s, Freud obtained a grant to study with Jean-Martin Charcot, the famed neurologist and syphilologist, at the Salpêtrière in Paris. Charcot had become interested in patients who had symptoms that mimicked general paresis (neuropsychiatric disorder affecting the brain and central nervous system, caused by syphilis infection).

Freud's first theory to explain hysterical symptoms was presented in Studies in Hysteria (1895), co-authored with Josef Breuer. He contended that at the root of hysterical symptoms were repressed memories of distressing occurrences, almost always having direct or indirect sexual associations. Around the same time he attempted to develop a neuro-physiological theory of unconscious mental mechanisms, which he soon gave up. It remained unpublished in his lifetime.

In 1896 Freud published his so-called seduction theory which proposed that the precondition for hysterical symptoms was sexual excitement in infancy, and he claimed to have uncovered repressed memories of incidents of sexual abuse for all his current patients. However by 1898 he had privately acknowledged to his friend and colleague Wilhelm Fliess that he no longer believed in his theory, though he did not state this publicly until 1906. Though in 1896 he had reported that his patients "had no feeling of remembering the [infantile sexual] scenes", and assured him "emphatically of their unbelief", in later accounts he claimed that they had told him that they had been sexually abused in infancy. This became the received historical account until challenged by several Freud scholars in the latter part of the 20th century who argued that he had imposed his preconceived notions on his patients. However, building on his claims that the patients reported infantile sexual abuse experiences, Freud subsequently contended that his clinical findings in the mid-1890s provided evidence of the occurrence of unconscious fantasies, supposedly to cover up memories of infantile masturbation. Only much later did he claim the same findings as evidence for Oedipal desires.

By 1900, Freud had conjectured that dreams had symbolic significance, and generally were specific to the dreamer. Freud formulated his second psychological theory— which postulates that the unconscious has or is a "primary process" consisting of symbolic and condensed thoughts, and a "secondary process" of logical, conscious thoughts. This theory was published in his 1900 book, The Interpretation of Dreams. Chapter VII was a re-
working of the earlier "Project" and Freud outlined his "Topographic Theory." In this theory, which was mostly later supplanted by the Structural Theory, unacceptable sexual wishes were repressed into the "System Unconscious," unconscious due to society's condemnation of premarital sexual activity, and this repression created anxiety.

**1900–1940s**

This "topographic theory" is still popular in much of Europe, although it has been superseded in much of North America. In 1905, Freud published Three Essays on the Theory of Sexuality in which he laid out his discovery of so-called psychosexual phases: oral (ages 0–2), anal (2-4), phallic-oedipal (today called 1st genital) (3-6), latency (6-puberty), and mature genital (puberty-onward). His early formulation included the idea that because of societal restrictions, sexual wishes were repressed into an unconscious state, and that the energy of these unconscious wishes could be turned into anxiety or physical symptoms. Therefore the early treatment techniques, including hypnotism and abreaction, were designed to make the unconscious conscious in order to relieve the pressure and the apparently resulting symptoms.

In On Narcissism (1915) Freud turned his attention to the subject of narcissism. Still utilizing an energetic system, Freud conceptualized the question of energy directed at the self versus energy directed at others, called cathexis. By 1917, In "Mourning and Melancholia," he suggested that certain depressions were caused by turning guilt-ridden anger on the self. In 1919 in "A Child is Being Beaten" he began to address the problems of self-destructive behavior (moral masochism) and frank sexual masochism. Based on his experience with depressed and self-destructive patients, and pondering the carnage of World War I, Freud became dissatisfied with considering only oral and sexual motivations for behavior. By 1920, Freud addressed the power of identification (with the leader and with other members) in groups as a motivation for behavior (Group Psychology and Analysis of the Ego). In that same year (1920) Freud suggested his "dual drive" theory of sexuality and aggression in Beyond the Pleasure Principle, to try to begin to explain human destructiveness.

In 1923, he presented his new "structural theory" of an id, ego, and superego in a book entitled, The Ego and the Id. Therein, he revised the whole theory of mental functioning, now considering that repression was only one of many defense mechanisms, and that it occurred to reduce anxiety. Note that repression, for Freud, is both a cause of anxiety and a response to anxiety. In 1926, in Inhibitions, Symptoms and Anxiety, Freud laid out how intrapsychic conflict among drive and superego (wishes and guilt) caused anxiety, and how that anxiety could lead to an inhibition of mental functions, such as intellect and speech. Inhibitions, Symptoms and Anxiety was written in response to Otto Rank, who, in 1924, published Das Trauma der Geburt (translated into English in 1929 as The Trauma of Birth), exploring how art, myth, religion, philosophy and therapy were illuminated by separation anxiety in the "phase before the development of the Oedipus complex" (p. 216). But there was no such phase in Freud's theories. The Oedipus complex, Freud explained tirelessly, was the nucleus of the neurosis and the foundational source of all art, myth, religion, philosophy, therapy—indeed of all human culture and civilization. It was the first time that
anyone in the inner circle had dared to suggest that the Oedipus complex might not be the only factor contributing to intrapsychic development

By 1936, the "Principle of Multiple Function" was clarified by Robert Waelder. He widened the formulation that psychological symptoms were caused by and relieved conflict simultaneously. Moreover, symptoms (such as phobias and compulsions) each represented elements of some drive wish (sexual and/or aggressive), superego (guilt), anxiety, reality, and defenses. Also in 1936, Anna Freud, Sigmund's famous daughter, published her seminal book, The Ego and the Mechanisms of Defense, outlining numerous ways the mind could shut upsetting things out of consciousness.

1940s-2000s

Following the death of Freud, a new group of psychoanalysts began to explore the function of the ego. Led by Heinz Hartmann, Kris, Rappaport and Lowenstein, the group built upon understandings of the synthetic function of the ego as a mediator in psychic functioning. Hartmann in particular distinguished between autonomous ego functions (such as memory and intellect which could be secondarily affected by conflict) and synthetic functions which were a result of compromise formation. These "Ego Psychologists" of the '50s paved a way to focus analytic work by attending to the defenses (mediated by the ego) before exploring the deeper roots to the unconscious conflicts. In addition there was burgeoning interest in child psychoanalysis. Although criticized since its inception, psychoanalysis has been used as a research tool into childhood development, and is still used to treat certain mental disturbances. In the 1960s, Freud's early thoughts on the childhood development of female sexuality were challenged; this challenge led to the development of a variety of understandings of female sexual development, many of which modified the timing and normality of several of Freud's theories (which had been gleaned from the treatment of women with mental disturbances). Several researchers followed Karen Horney's studies of societal pressures that influence the development of women. Most contemporary North American psychoanalysts employ theories that, while based on those of Sigmund Freud, include many modifications of theory and practice developed since his death in 1939.

In the first decade of the 21st century there are approximately 35 training institutes for psychoanalysis in the United States accredited by the American Psychoanalytic Association which is a component organization of the International Psychoanalytical Association, and there are over 3,000 graduated psychoanalysts practicing in the United States. The International Psychoanalytical Association accredits psychoanalytic training centers throughout the rest of the world, including countries such as Serbia, France, Germany, Austria, Italy, Switzerland, and many others, as well as about six institutes directly in the U.S. Freud published a paper entitled The History of the Psychoanalytic Movement in 1914, German original being first published in the Jahrbuch der Psychoanalyse.

Theories

The predominant psychoanalytic theories can be grouped into several theoretical "schools." Although these theoretical "schools" differ, most of them continue to stress the
strong influence of unconscious elements affecting people’s mental lives. There has also been considerable work done on consolidating elements of conflicting theory (cf. the work of Theodore Dorpat, B. Killingmo, and S. Akhtar). As in all fields of healthcare, there are some persistent conflicts regarding specific causes of some syndromes, and disputes regarding the best treatment techniques. In the 21st century, psychoanalytic ideas are embedded in Western culture, especially in fields such as childcare, education, literary criticism, cultural studies, and mental health, particularly psychotherapy. Though there is a mainstream of evolved analytic ideas, there are groups who follow the precepts of one or more of the later theoreticians. Psychoanalytic ideas also play roles in some types of literary analysis such as Archetypal literary criticism.

**Topographic theory**

Topographic theory was first described by Freud in The Interpretation of Dreams (1900). The theory posits that the mental apparatus can be divided into the systems Conscious, Pre-conscious and Unconscious. These systems are not anatomical structures of the brain but, rather, mental processes. Although Freud retained this theory throughout his life he largely replaced it with the Structural theory. The Topographic theory remains as one of the metapsychological points of view for describing how the mind functions in classical psychoanalytic theory.

**Structural theory**

Structural theory divides the psyche into the id, the ego, and the super-ego. The id is present at birth as the repository of basic instincts, which Freud called "Trieb" ("drives"): unorganised and unconscious, it operates merely on the 'pleasure principle', without realism or foresight. The ego develops slowly and gradually, being concerned with mediating between the urgings of the id and the realities of the external world; it thus operates on the 'reality principle'. The super-ego is held to be the part of the ego in which self-observation, self-criticism and other reflective and judgemental faculties develop. The ego and the super-ego are both partly conscious and partly unconscious.

**Ego psychology**

Ego psychology was initially suggested by Freud in Inhibitions, Symptoms and Anxiety (1926). The theory was refined by Hartmann, Loewenstein, and Kris in a series of papers and books from 1939 through the late 1960s. Leo Bellak was a later contributor. This series of constructs, paralleling some of the later developments of cognitive theory, includes the notions of autonomous ego functions: mental functions not dependent, at least in origin, on intrapsychic conflict. Such functions include: sensory perception, motor control, symbolic thought, logical thought, speech, abstraction, integration (synthesis), orientation, concentration, judgment about danger, reality testing, adaptive ability, executive decision-making, hygiene, and self-preservation. Freud noted that inhibition is one method that the mind may utilize to interfere with any of these functions in order to avoid painful emotions. Hartmann (1950s) pointed out that there may be delays or deficits in such functions.
Frosch (1964) described differences in those people who demonstrated damage to their relationship to reality, but who seemed able to test it. Deficits in the capacity to organize thought are sometimes referred to as blocking or loose associations (Bleuler), and are characteristic of the schizophrenias. Deficits in abstraction ability and self-preservation also suggest psychosis in adults. Deficits in orientation and sensorium are often indicative of a medical illness affecting the brain (and therefore, autonomous ego functions). Deficits in certain ego functions are routinely found in severely sexually or physically abused children, where powerful effects generated throughout childhood seem to have eroded some functional development.

Ego strengths, later described by Kernberg (1975), include the capacities to control oral, sexual, and destructive impulses; to tolerate painful affects without falling apart; and to prevent the eruption into consciousness of bizarre symbolic fantasy. Synthetic functions, in contrast to autonomous functions, arise from the development of the ego and serve the purpose of managing conflictual processes. Defenses are synthetic functions that protect the conscious mind from awareness of forbidden impulses and thoughts. One purpose of ego psychology has been to emphasize that some mental functions can be considered to be basic, rather than derivatives of wishes, affects, or defenses. However, autonomous ego functions can be secondarily affected because of unconscious conflict. For example, a patient may have an hysterical amnesia (memory being an autonomous function) because of intrapsychic conflict (wishing not to remember because it is too painful).

Taken together, the above theories present a group of metapsychological assumptions. Therefore, the inclusive group of the different classical theories provides a cross-sectional view of human mentation. There are six "points of view", five described by Freud and a sixth added by Hartmann. Unconscious processes can therefore be evaluated from each of these six points of view. The "points of view" are: 1. Topographic 2. Dynamic (the theory of conflict) 3. Economic (the theory of energy flow) 4. Structural 5. Genetic (propositions concerning origin and development of psychological functions) and 6. Adaptational (psychological phenomena as it relates to the external world).

**Modern conflict theory**

A variation of ego psychology, termed "modern conflict theory", is more broadly an update and revision of structural theory (Freud, 1923, 1926); it does away with some of structural theory's more arcane features, such as where repressed thoughts are stored. Modern conflict theory looks at how emotional symptoms and character traits are complex solutions to mental conflict. It dispenses with the concepts of a fixed id, ego and superego, and instead posits conscious and unconscious conflict among wishes (dependent, controlling, sexual, and aggressive), guilt and shame, emotions (especially anxiety and depressive affect), and defensive operations that shut off from consciousness some aspect of the others. Moreover, healthy functioning (adaptive) is also determined, to a great extent, by resolutions of conflict.

A major objective of modern conflict-theory psychoanalysis is to change the balance of conflict in a patient by making aspects of the less adaptive solutions (also called
"compromise formations") conscious so that they can be rethought, and more adaptive solutions found. Current theoreticians following Brenner’s many suggestions (see especially Brenner’s 1982 book, The Mind in Conflict) include Sandor Abend, MD (Abend, Porder, & Willick, (1983), Borderline Patients: Clinical Perspectives), Jacob Arlow (Arlow and Brenner (1964), Psychoanalytic Concepts and the Structural Theory), and Jerome Blackman (2003), 101 Defenses: How the Mind Shields Itself.

Object relations theory

Object relations theory attempts to explain vicissitudes of human relationships through a study of how internal representations of self and of others are structured. The clinical symptoms that suggest object relations problems (typically developmental delays throughout life) include disturbances in an individual’s capacity to feel warmth, empathy, trust, sense of security, identity stability, consistent emotional closeness, and stability in relationships with chosen other human beings. (It is not suggested that one should trust everyone, for example.) Concepts regarding internal representations (also sometimes termed, "introjects," "self and object representations," or "internalizations of self and other") although often attributed to Melanie Klein, were actually first mentioned by Sigmund Freud in his early concepts of drive theory (Three Essays on the Theory of Sexuality, 1905). Freud’s 1917 paper "Mourning and Melancholia", for example, hypothesized that unresolved grief was caused by the survivor’s internalized image of the deceased becoming fused with that of the survivor, and then the survivor shifting unacceptable anger toward the deceased onto the now complex self image.

Vamik Volkan, in "Linking Objects and Linking Phenomena", expanded on Freud’s thoughts on this, describing the syndromes of "Established pathological mourning" vs. "reactive depression" based on similar dynamics. Melanie Klein’s hypotheses regarding internalizations during the first year of life, leading to paranoid and depressive positions, were later challenged by Rene Spitz (e.g., The First Year of Life, 1965), who divided the first year of life into a coenesthetic phase of the first six months, and then a diacritic phase for the second six months. Margaret Mahler (Mahler, Fine, and Bergman, "The Psychological Birth of the Human Infant", 1975) and her group, first in New York, then in Philadelphia, described distinct phases and subphases of child development leading to "separation-individuation" during the first three years of life, stressing the importance of constancy of parental figures, in the face of the child’s destructive aggression, to the child’s internalizations, stability of affect management, and ability to develop healthy autonomy.

Later developers of the theory of self and object constancy as it affects adult psychiatric problems such as psychosis and borderline states have been John Frosch, Otto Kernberg, and Salman Akhtar. Peter Blos described (in a book called On Adolescence, 1960) how similar separation-individuation struggles occur during adolescence, of course with a different outcome from the first three years of life: the teen usually, eventually, leaves the parents’ house (this varies with the culture). During adolescence, Erik Erikson (1950–1960s) described the "identity crisis," that involves identity-diffusion anxiety. In order for an adult to be able to experience "Warm-ETHICS" (warmth, empathy, trust, holding environment (Winnicott), identity, closeness, and stability) in relationships (see Blackman,
101 Defenses: How the Mind Shields Itself, 2001), the teenager must resolve the problems with identity and redevelop self and object constancy.

**Self psychology**

Self psychology emphasizes the development of a stable and integrated sense of self through empathic contacts with other humans, primary significant others conceived of as "self-objects." Self-objects meet the developing self's needs for mirroring, idealization, and twinship, and thereby strengthen the developing self. The process of treatment proceeds through "transmuting internalizations" in which the patient gradually internalizes the self-object functions provided by the therapist. Self psychology was proposed originally by Heinz Kohut, and has been further developed by Arnold Goldberg, Frank Lachmann, Paul and Anna Ornstein, Marian Tolpin, and others.

**Jacques Lacan/Lacanian psychoanalysis**

Lacanian psychoanalysis, which integrates psychoanalysis with semiotics and Hegelian philosophy, is especially popular in France and parts of Latin America. Lacanian psychoanalysis is a departure from the traditional British and American psychoanalysis, which is predominantly Ego psychology. Jacques Lacan frequently used the phrase "retourner à Freud" ("return to Freud") in his seminars and writings, as he claimed that his theories were an extension of Freud’s own, contrary to those of Anna Freud, the Ego Psychology, object relations and "self" theories and also claims the necessity of reading Freud’s complete works, not only a part of them. Lacan's concepts concern the "mirror stage", the "Real", the "Imaginary" and the "Symbolic", and the claim that "the unconscious is structured as a language".

Though a major influence on psychoanalysis in France and parts of Latin America, Lacan and his ideas have had little to no impact on psychoanalysis or psychotherapy in the English-speaking world, where his ideas are most-widely used to analyze texts in literary theory. Due to his unorthodox methods and theories, Lacan was expelled by the International Psychoanalytic Association, and many of Lacan's psychoanalytic concepts have been described as nonsensical, inconsistent or pseudoscientific.

**Interpersonal psychoanalysis**

Interpersonal psychoanalysis accent the nuances of interpersonal interactions, particularly how individuals protect themselves from anxiety by establishing collusive interactions with others, and the relevance of actual experiences with other persons developmentally (e.g. family and peers) as well as in the present. This is contrasted with the primacy of intrapsychic forces, as in classical psychoanalysis. Interpersonal theory was first introduced by Harry Stack Sullivan, MD, and developed further by Frieda Fromm-Reichmann, Clara Thompson, Erich Fromm, and others who contributed to the founding of the William Alanson White Institute and Interpersonal Psychoanalysis in general.

**Culturalist psychoanalysts**
Some psychoanalysts have been labeled culturalist, because of the prominence they gave on culture for the genesis of behavior. Among others, Erich Fromm, Karen Horney, Harry Stack Sullivan, have been called culturalist psychoanalysts. They were famously in conflict with orthodox psychoanalysts.

**Relational psychoanalysis**

Relational psychoanalysis combines interpersonal psychoanalysis with object-relations theory and with Inter-subjective theory as critical for mental health, was introduced by Stephen Mitchell. Relational psychoanalysis emphasizes how the individual's personality is shaped by both real and imagined relationships with others, and how these relationship patterns are re-enacted in the interactions between analyst and patient. In New York, key proponents of relational psychoanalysis include Lew Aron, Jessica Benjamin, and Adrienne Harris. Fonagy and Target, in London, have propounded their view of the necessity of helping certain detached, isolated patients, develop the capacity for "mentализation" associated with thinking about relationships and themselves. Arietta Slade, Susan Coates, and Daniel Schechter in New York have additionally contributed to the application of relational psychoanalysis to treatment of the adult patient-as-parent, the clinical study of mentalization in parent-infant relationships, and the intergenerational transmission of attachment and trauma.

**Interpersonal-Relational psychoanalysis**

The term interpersonal-relational psychoanalysis is often used as a professional identification. Psychoanalysts under this broader umbrella debate about what precisely are the differences between the two schools, without any current clear consensus.

**Intersubjective psychoanalysis**


**Modern psychoanalysis**

"Modern psychoanalysis" is a term coined by Hyman Spotnitz and his colleagues to describe a body of theoretical and clinical approaches that aim to extend Freud's theories so as to make them applicable to the full spectrum of emotional disorders and broaden the potential for treatment to pathologies thought to be untreatable by classical methods.
Interventions based on this approach are primarily intended to provide an emotional-maturational communication to the patient, rather than to promote intellectual insight. These interventions, beyond insight directed aims, are used to resolve resistances that are presented in the clinical setting. This school of psychoanalysis has fostered training opportunities for students in the United States and from countries worldwide. Its journal Modern Psychoanalysis has been published since 1976.

**Psychopathology (mental disturbances)**

**Adult patients**

The various psychoses involve deficits in the autonomous ego functions (see above) of integration (organization) of thought, in abstraction ability, in relationship to reality and in reality testing. In depressions with psychotic features, the self-preservation function may also be damaged (sometimes by overwhelming depressive affect). Because of the integrative deficits (often causing what general psychiatrists call "loose associations," "blocking," "flight of ideas," "verbigeration," and "thought withdrawal"), the development of self and object representations is also impaired. Clinically, therefore, psychotic individuals manifest limitations in warmth, empathy, trust, identity, closeness and/or stability in relationships (due to problems with self-object fusion anxiety) as well.

In patients whose autonomous ego functions are more intact, but who still show problems with object relations, the diagnosis often falls into the category known as "borderline." Borderline patients also show deficits, often in controlling impulses, affects, or fantasies – but their ability to test reality remains more or less intact. Adults who do not experience guilt and shame, and who indulge in criminal behavior, are usually diagnosed as psychopaths, or, using DSM-IV-TR, antisocial personality disorder.

Panic, phobias, conversions, obsessions, compulsions and depressions (analysts call these "neurotic symptoms") are not usually caused by deficits in functions. Instead, they are caused by intrapsychic conflicts. The conflicts are generally among sexual and hostile-aggressive wishes, guilt and shame, and reality factors. The conflicts may be conscious or unconscious, but create anxiety, depressive affect, and anger. Finally, the various elements are managed by defensive operations – essentially shut-off brain mechanisms that make people unaware of that element of conflict. "Repression" is the term given to the mechanism that shuts thoughts out of consciousness. "Isolation of affect" is the term used for the mechanism that shuts sensations out of consciousness. Neurotic symptoms may occur with or without deficits in ego functions, object relations, and ego strengths. Therefore, it is not uncommon to encounter obsessive-compulsive schizophrenics, panic patients who also suffer with borderline personality disorder, etc.

This section above is partial to ego psychoanalytic theory "autonomous ego functions." As the "autonomous ego functions" theory is only a theory, it may yet be proven incorrect.
Childhood origins

Freudian theories point out that adult problems can be traced to unresolved conflicts from certain phases of childhood and adolescence. Freud, based on the data gathered from his patients early in his career, suspected that neurotic disturbances occurred when children were sexually abused in childhood (the so-called seduction theory). Later, Freud came to believe that, although child abuse occurs, not all neurotic symptoms were associated with this. He realized that neurotic people often had unconscious conflicts that involved incestuous fantasies deriving from different stages of development. He found the stage from about three to six years of age (preschool years, today called the "first genital stage") to be filled with fantasies of having romantic relationships with both parents. Although arguments were generated in early 20th-century Vienna about whether adult seduction of children was the basis of neurotic illness, there is virtually no argument about this problem in the 21st century.

Many psychoanalysts who work with children have studied the actual effects of child abuse, which include ego and object relations deficits and severe neurotic conflicts. Much research has been done on these types of trauma in childhood, and the adult sequelae of those. On the other hand, many adults with symptom neuroses and character pathology have no history of childhood sexual or physical abuse. In studying the childhood factors that start neurotic symptom development, Freud found a constellation of factors that, for literary reasons, he termed the Oedipus complex (based on the play by Sophocles, Oedipus Rex, where the protagonist unwittingly kills his father Laius and marries his mother Jocasta). The shorthand term, "oedipal" — later explicated by Joseph Sandler in "On the Concept Superego" (1960) and modified by Charles Brenner in "The Mind in Conflict" (1982) — refers to the powerful attachments that children make to their parents in the preschool years. These attachments involve fantasies of sexual relationships with either (or both) parent, and, therefore, competitive fantasies toward either (or both) parents. Humberto Nagera (1975) has been particularly helpful in clarifying many of the complexities of the child through these years.

The terms "positive" and "negative" oedipal conflicts have been attached to the heterosexual and homosexual aspects, respectively. Both seem to occur in development of most children. Eventually, the developing child’s concessions to reality (that they will neither marry one parent nor eliminate the other) lead to identifications with parental values. These identifications generally create a new set of mental operations regarding values and guilt, subsumed under the term "superego." Besides superego development, children "resolve" their preschool oedipal conflicts through channeling wishes into something their parents approve of ("sublimation") and the development, during the school-age years ("latency") of age-appropriate obsessive-compulsive defensive maneuvers (rules, repetitive games).

Treatment

Using the various analytic theories to assess mental problems, several particular constellations of problems are particularly suited for analytic techniques (see below)
whereas other problems respond better to medicines and different interpersonal interventions. To be treated with psychoanalysis, whatever the presenting problem, the person requesting help must demonstrate a desire to start an analysis. The person wishing to start an analysis must have some capacity for speech and communication. As well, they need to be able to have trust and empathy within the psychoanalytic session. Potential patients must undergo a preliminary stage of treatment to assess their amenability to psychoanalysis, at that time, and also to enable the analyst to form a working psychological model which the analyst will use to direct the treatment. Psychoanalysts mainly work with neurosis and hysteria in particular, however adapted forms of psychoanalysis are used in working with schizophrenia and other forms of psychosis. Finally, if a prospective patient is severely suicidal a longer preliminary stage may be employed, sometimes with sessions which have a twenty minute break in the middle. There are modifications of techniques due to the radically individualistic nature of each person’s analysis.

The most common problems treatable with psychoanalysis include: phobias, conversions, compulsions, obsessions, anxiety, attacks, depressions, sexual dysfunctions, a wide variety of relationship problems (such as dating and marital strife), and a wide variety of character problems (for example, painful shyness, meanness, obnoxiousness, workaholism, hyperseductiveness, hyperemotionality, hyperfastidiousness). The fact that many of such patients also demonstrate deficits above makes diagnosis and treatment selection difficult.

Analytical organizations such as the International Psychoanalytic Association, The American Psychoanalytic Association, and the European Federation for Psychoanalytic Psychotherapy, have established procedures and models for the indication and practice of psychoanalytical therapy for trainees in analysis. The match between the analyst and the patient can be viewed as another contributing factor for the indication and contraindication for psychoanalytic treatment. The analyst decides whether the patient is suitable for psychoanalysis. This decision made by the analyst, besides made on the usual indications and pathology, is also based to a certain degree by the "fit" between analyst and patient. A person's suitability for analysis at any particular time is based on their desire to know something about where their illness has come from. Someone who is not suitable for analysis expresses no desire to know more about the root causes of their illness. An evaluation may include one or more other analysts' independent opinions and will include discussion of the patient's financial situation and insurances.

**Techniques**

The basic method of psychoanalysis is interpretation of the patient’s unconscious conflicts that are interfering with current-day functioning – conflicts that are causing painful symptoms such as phobias, anxiety, depression, and compulsions. Strachey (1936) stressed that figuring out ways the patient distorted perceptions about the analyst led to understanding what may have been forgotten (also see Freud’s paper “Repeating, Remembering, and Working Through”). In particular, unconscious hostile feelings toward the analyst could be found in symbolic, negative reactions to what Robert Langs later called the "frame" of the therapy – the setup that included times of the sessions, payment of fees, and necessity of talking. In patients who made mistakes, forgot, or showed other
peculiarities regarding time, fees, and talking, the analyst can usually find various unconscious "resistances" to the flow of thoughts (sometimes called free association).

**Freud's patients would lie on this couch during psychoanalysis**

When the patient reclines on a couch with the analyst out of view, the patient tends to remember more, experience more resistance and transference, and be able to reorganize thoughts after the development of insight – through the interpretive work of the analyst. Although fantasy life can be understood through the examination of dreams, masturbation fantasies (cf. Marcus, I. and Francis, J. (1975), Masturbation from Infancy to Senescence) are also important. The analyst is interested in how the patient reacts to and avoids such fantasies (cf. Paul Gray (1994), The Ego and the Analysis of Defense). Various memories of early life are generally distorted – Freud called them "screen memories" – and in any case, very early experiences (before age two) – can not be remembered (See the child studies of Eleanor Galenson on "evocative memory").

**Variations in technique**

There is what is known among psychoanalysts as "classical technique," although Freud throughout his writings deviated from this considerably, depending on the problems of any given patient. Classical technique was summarized by Allan Compton, MD, as comprising instructions (telling the patient to try to say what's on their mind, including interferences); exploration (asking questions); and clarification (rephrasing and summarizing what the patient has been describing). As well, the analyst can also use confrontation to bringing an aspect of functioning, usually a defense, to the patient's attention. The analyst then uses a variety of interpretation methods, such as dynamic interpretation (explaining how being too nice guards against guilt, e.g. - defense vs. affect); genetic interpretation (explaining how a past event is influencing the present); resistance interpretation (showing the patient how they are avoiding their problems); transference interpretation (showing the patient ways old conflicts arise in current relationships, including that with the analyst); or dream interpretation (obtaining the patient's thoughts about their dreams and connecting this with their current problems). Analysts can also use reconstruction to estimate what may have happened in the past that created some current issue.

These techniques are primarily based on conflict theory (see above). As object relations theory evolved, supplemented by the work of Bowlby, Ainsworth, and Beebe, techniques with patients who had more severe problems with basic trust (Erikson, 1950) and a history of maternal deprivation (see the works of Augusta Alpert) led to new techniques with adults. These have sometimes been called interpersonal, intersubjective (cf. Stolorow), relational, or corrective object relations techniques. These techniques include expressing an empathic attunement to the patient or warmth; exposing a bit of the analyst’s personal life or attitudes to the patient; allowing the patient autonomy in the form of disagreement with the analyst (cf. I.H. Paul, Letters to Simon.); and explaining the motivations of others which the patient misperceives. Ego psychological concepts of deficit in functioning led to refinements in supportive therapy. These techniques are particularly applicable to psychotic and near-psychotic (cf., Eric Marcus, "Psychosis and Near-psychosis") patients.
These supportive therapy techniques include discussions of reality; encouragement to stay alive (including hospitalization); psychotropic medicines to relieve overwhelming depressive affect or overwhelming fantasies (hallucinations and delusions); and advice about the meanings of things (to counter abstraction failures).

The notion of the "silent analyst" has been criticized. Actually, the analyst listens using Arlow’s approach as set out in "The Genesis of Interpretation"), using active intervention to interpret resistances, defenses creating pathology, and fantasies. Silence is not a technique of psychoanalysis (also see the studies and opinion papers of Owen Renik, MD). "Analytic Neutrality" is a concept that does not mean the analyst is silent. It refers to the analyst’s position of not taking sides in the internal struggles of the patient. For example, if a patient feels guilty, the analyst might explore what the patient has been doing or thinking that causes the guilt, but not reassure the patient not to feel guilty. The analyst might also explore the identifications with parents and others that led to the guilt.

Interpersonal-Relational psychoanalysts emphasize the notion that it is impossible to be neutral. Sullivan introduced the term "participant-observer" to indicate the analyst inevitably interacts with the analysand, and suggested the detailed inquiry as an alternative to interpretation. The detailed inquiry involves noting where the analysand is leaving out important elements of an account and noting when the story is obfuscated, and asking careful questions to open up the dialogue.

**Group therapy and play therapy**

Although single-client sessions remain the norm, psychoanalytic theory has been used to develop other types of psychological treatment. Psychoanalytic group therapy was pioneered by Trigant Burrow, Joseph Pratt, Paul F. Schilder, Samuel R. Slavson, Harry Stack Sullivan, and Wolfe. Child-centered counseling for parents was instituted early in analytic history by Freud, and was later further developed by Irwin Marcus, Edith Schulhofer, and Gilbert Kliman. Psychoanalytically based couples therapy has been promulgated and explicated by Fred Sander, MD. Techniques and tools developed in the first decade of the 21st century have made psychoanalysis available to patients who were not treatable by earlier techniques. This meant that the analytic situation was modified so that it would be more suitable and more likely to be helpful for these patients. M.N. Eagle (2007) believes that psychoanalysis cannot be a self-contained discipline but instead must be open to influence from and integration with findings and theory from other disciplines.

Psychoanalytic constructs have been adapted for use with children with treatments such as play therapy, art therapy, and storytelling. Throughout her career, from the 1920s through the 1970s, Anna Freud adapted psychoanalysis for children through play. This is still used today for children, especially those who are preadolescent (see Leon Hoffman, New York Psychoanalytic Institute Center for Children). Using toys and games, children are able to demonstrate, symbolically, their fears, fantasies, and defenses; although not identical, this technique, in children, is analogous to the aim of free association in adults. Psychoanalytic play therapy allows the child and analyst to understand children’s conflicts, particularly defenses such as disobedience and withdrawal, that have been guarding against various
unpleasant feelings and hostile wishes. In art therapy, the counselor may have a child draw a portrait and then tell a story about the portrait. The counselor watches for recurring themes—regardless of whether it is with art or toys.

**Cultural variations**

Psychoanalysis can be adapted to different cultures, as long as the therapist or counseling understands the client's culture. For example, Tori and Blimes found that defense mechanisms were valid in a normative sample of 2,624 Thais. The use of certain defense mechanisms was related to cultural values. For example Thais value calmness and collectiveness (because of Buddhist beliefs), so they were low on regressive emotionality. Psychoanalysis also applies because Freud used techniques that allowed him to get the subjective perceptions of his patients. He takes an objective approach by not facing his clients during his talk therapy sessions. He met with his patients wherever they were, such as when he used free association — where clients would say whatever came to mind without self-censorship. His treatments had little to no structure for most cultures, especially Asian cultures. Therefore, it is more likely that Freudian constructs will be used in structured therapy (Thompson, et al., 2004). In addition, Corey postulates that it will be necessary for a therapist to help clients develop a cultural identity as well as an ego identity.

**Cost and length of treatment**

The cost to the patient of psychoanalytic treatment ranges widely from place to place and between practitioners. Low-rate analysis is often available in a psychoanalytic training clinic and graduate schools. Otherwise, the fee set by each analyst varies with the analyst's training and experience. Since, in most locations in the United States, unlike in Ontario and Germany, classical analysis (which usually requires sessions three to five times per week) is not covered by health insurance, many analysts may negotiate their fees with patients whom they feel they can help, but who have financial difficulties. The modifications of analysis, which include dynamic therapy, brief therapies, and certain types of group therapy (cf. Slavson, S. R., A Textbook in Analytic Group Therapy), are carried out on a less frequent basis - usually once, twice, or three times a week - and usually the patient sits facing the therapist.

Many studies have also been done on briefer "dynamic" treatments; these are more expedient to measure, and shed light on the therapeutic process to some extent. Brief Relational Therapy (BRT), Brief Psychodynamic Therapy (BPT), and Time-Limited Dynamic Therapy (TLDP) limit treatment to 20-30 sessions. On average, classical analysis may last 5.7 years, but for phobias and depressions uncomplicated by ego deficits or object relations deficits, analysis may run for a shorter period of time. Longer analyses are indicated for those with more serious disturbances in object relations, more symptoms, and more ingrained character pathology (such as obnoxiousness, severe passivity, or heinous procrastination).
Training and research

Psychoanalytic training in the United States, in most locations, involves personal analytic treatment for the trainee, conducted confidentially, with no report to the Education Committee of the Analytic Training Institute; approximately 600 hours of class instruction, with a standard curriculum, over a four-year period. Classes are often a few hours per week, or for a full day or two every other weekend during the academic year; this varies with the institute; and supervision once per week, with a senior analyst, on each analytic treatment case the trainee has. The minimum number of cases varies between institutes, often two to four cases. Male and female cases are required. Supervision must go on for at least a few years on one or more cases. Supervision is done in the supervisor's office, where the trainee presents material from the analytic work that week, examines the unconscious conflicts with the supervisor, and learns, discusses, and is advised about technique.

Many psychoanalytic Training Centers in the United States have been accredited by special committees of the American Psychoanalytic Association or the International Psychoanalytical Association. Because of theoretical differences, other independent institutes arose, usually founded by psychologists, who until 1987 were not permitted access to psychoanalytic training institutes of the American Psychoanalytic Association. Currently there are between seventy-five and one hundred independent institutes in the United States. As well, other institutes are affiliated to other organizations such as the American Academy of Psychoanalysis and Dynamic Psychiatry, and the National Association for the Advancement of Psychoanalysis. At most psychoanalytic institutes in the United States, qualifications for entry include a terminal degree in a mental health field, such as Ph.D., Psy.D., M.S.W., or M.D. A few institutes restrict applicants to those already holding an M.D. or Ph.D., and most institutes in Southern California confer a Ph.D. or Psy.D. in psychoanalysis upon graduation, which involves completion of the necessary requirements for the state boards that confer that doctoral degree. The first training institute in America to educate non-medical psychoanalysts was The National Psychological Association for Psychoanalysis, (1978) in New York City. It was founded by the world famous analyst Theodor Reik.

Some psychoanalytic training has been set up as a post-doctoral fellowship in university settings, such as at Duke University, Yale University, New York University, Adelphi University, and Columbia University. Other psychoanalytic institutes may not be directly associated with universities, but the faculty at those institutes usually hold contemporaneous faculty positions with psychology Ph.D. programs and/or with Medical School psychiatry residency programs.

The International Psychoanalytical Association (IPA) is the world’s primary accrediting and regulatory body for psychoanalysis. Their mission is to assure the continued vigour and development of psychoanalysis for the benefit of psychoanalytic patients. It works in partnership with its 70 constituent organizations in 33 countries to support 11,500 members. In the US, there are 77 psychoanalytical organizations, institutes associations in the United States, which are spread across the states of America. The American Psychoanalytic Association (APSaA) has 38 affiliated societies, which have ten or more
active members who practice in a given geographical area. The aims of the APSaA and other psychoanalytical organizations are: provide ongoing educational opportunities for its members, stimulate the development and research of psychoanalysis, provide training and organize conferences. There are eight affiliated study groups in the USA (two of them are in Latin America). A study group is the first level of integration of a psychoanalytical body within the International Psychoanalytic Association (IPA), followed by a provisional society and finally a member society.

The Division of Psychoanalysis (39) of the American Psychological Association (APA) was established in the early 1980s by several psychologists. Until the establishment of the Division of Psychoanalysis, psychologists who had trained in independent institutes had no national organization. The Division of Psychoanalysis now has approximately 4,000 members and approximately thirty local chapters in the United States. The Division of Psychoanalysis holds two annual meetings/conferences and offers continuing education in theory, research and clinical technique, as do their affiliated local chapters. The European Psychoanalytical Federation (EPF) is the scientific organization that consolidates all European psychoanalytic societies. This organization is affiliated with the IPA. In 2002 there were approximately 3900 individual members in twenty-two countries, speaking eighteen different languages. There are also twenty-five psychoanalytic societies.

The National Membership Committee for Psychoanalysis in Clinical Social Work was also started in the mid-eighties to represent social work psychoanalysts. Founded by Crayton Rowe, MSW it included in its membership Rueben and Gertrude Blanck who were well known ego psychologists. Other notable members are Joyce Edward, Jean Sanville and Diana Siskind. Recently, NMCOP changed its name to the American Association of Psychoanalysis in Clinical Social Work (AAPCSW). The organization holds a bi-annual national conferences as well as numerous annual state and area meetings in 16 area chapters. These conferences provide sessions on theory, technique and research.

**Psychoanalysis in Britain**

The London Psychoanalytical Society was founded by Ernest Jones on 30 October 1913. With the expansion of psychoanalysis in the United Kingdom the Society was renamed the British Psychoanalytical Society in 1919. Soon after, the Institute of Psychoanalysis was established to administer the Society's activities. These include: the training of psychoanalysts, the development of the theory and practice of psychoanalysis, the provision of treatment through The London Clinic of Psychoanalysis, the publication of books in The New Library of Psychoanalysis and Psychoanalytic Ideas. The Institute of Psychoanalysis also publishes The International Journal of Psychoanalysis, maintains a library, furthers research, and holds public lectures. The Society has a Code of Ethics and an Ethical Committee. The Society, the Institute and the Clinic are all located at Byron House.

The Society is a component of the International Psychoanalytical Association, a body with members on all five continents that safeguards professional and ethical practice. The Society is a member of the British Psychoanalytic Council (BPC); the BPC publishes a register of British psychoanalysts and psychoanalytical psychotherapists. All members of
the British Psychoanalytical Society are required to undertake continuing professional development.

Through its work – and the work of its individual members – the British Psychoanalytical Society has made an unrivalled contribution to the understanding and treatment of mental illness. Members of the Society have included Michael Balint, Wilfred Bion, John Bowlby, Anna Freud, Melanie Klein, Joseph Sandler, and Donald Winnicott.

The Institute of Psychoanalysis is the foremost publisher of psychoanalytic literature. The 24-volume Standard Edition of the Complete Psychological Works of Sigmund Freud was conceived, translated, and produced under the direction of the British Psychoanalytical Society. The Society, in conjunction with Random House, will soon publish a new, revised and expanded Standard Edition. With [The New Library of Psychoanalysis] the Institute continues to publish the books of leading theorists and practitioners. The International Journal of Psychoanalysis is published by the Institute of Psychoanalysis. Now in its 84th year, it has one of the largest circulations of any psychoanalytic journal.

**Research**

Over a hundred years of case reports and studies in the journal Modern Psychoanalysis, the Psychoanalytic Quarterly, the International Journal of Psychoanalysis and the Journal of the American Psychoanalytic Association have analyzed efficacy of analysis in cases of neurosis and character or personality problems. Psychoanalysis modified by object relations techniques has been shown to be effective in many cases of ingrained problems of infancy, problems and relationship (cf. the many books of Otto Kernberg). As a therapeutic treatment, psychoanalytic techniques may be useful in a one-session consultation. Psychoanalytic treatment, in other situations, may run from about a year to many years, depending on the severity and complexity of the pathology.

Psychoanalytic theory has, from its inception, been the subject of criticism and controversy. Freud remarked on this early in his career, when other physicians in Vienna ostracized him for his findings that hysterical conversion symptoms were not limited to women. Challenges to analytic theory began with Otto Rank and Alfred Adler (turn of the 20th century), continued with behaviorists (e.g. Wolpe) into the 1940s and 50s, and have persisted. Criticisms come from those who object to the notion that there are mechanisms, thoughts or feelings in the mind that could be unconscious. Criticisms also have been leveled against the discovery of "infantile sexuality" (the recognition that children between ages two and six imagine things about procreation). Criticisms of theory have led to variations in analytic theories, such as the work of Ronald Fairbairn, Michael Balint, and John Bowlby. In the past 30 years or so, the criticisms have centered on the issue of empirical verification, in spite of many empirical, prospective research studies that have been empirically validated (e.g. See the studies of Barbara Milrod, at Cornell University Medical School, et al.). Recently in scientific literature we can find research supporting many Freud's ideas, e.g. unconsciousness, repression etc.
Psychoanalysis has been used as a research tool into childhood development (cf. the journal *The Psychoanalytic Study of the Child*), and has developed into a flexible, effective treatment for certain mental disturbances. In the 1960s, Freud's early (1905) thoughts on the childhood development of female sexuality were challenged; this challenge led to major research in the 1970s and 80s, and then to a reformulation of female sexual development that corrected some of Freud's concepts. Also see the various works of Eleanor Galenson, Nancy Chodorow, Karen Horney, Francoise Dolto, Melanie Klein, Selma Fraiberg, and others. Most recently, psychoanalytic researchers who have integrated attachment theory into their work, including Alicia Lieberman, Susan Coates, and Daniel Schechter have explored the role of parental traumatization in the development of young children's mental representations of self and others.

Several meta-analysis have shown psychoanalysis and psychodynamic therapy to be effective, with outcomes comparable or greater than other kinds of psychotherapy or antidepressant drugs. Empirical research has shown also that "proper", long-term psychoanalysis, when patient lies on a coach and meets with analyst at least three times a week, is also effective. A 2005 review of randomized controlled trials found that "psychoanalytic therapy is (1) more effective than no treatment or treatment as usual, and (2) more effective than shorter forms of psychodynamic therapy". Empirical research on the efficacy of psychoanalysis and psychoanalytic psychotherapy has also become prominent among psychoanalytic researchers.

Research on psychodynamic treatment of some populations shows mixed results. Research by analysts such as Bertram Karon and colleagues at Michigan State University had suggested that when trained properly, psychodynamic therapists can be effective with schizophrenic patients. More recent research casts doubt on these claims. The Schizophrenia Patient Outcomes Research Team (PORT) report argues in its Recommendation 22 against the use of psychodynamic therapy in cases of schizophrenia, noting that more trials are necessary to verify its effectiveness. However, the PORT recommendation is based on the opinions of clinicians rather than on empirical data, and empirical data exist that contradict this recommendation.

A review of current medical literature in The Cochrane Library, of which is available online) reached the conclusion that no data exist that demonstrate that psychodynamic psychotherapy is effective in treating schizophrenia. Dr. Hyman Spotnitz and the practitioners of his theory known as Modern Psychoanalysis, a specific sub-specialty, still report (2007) much success in using their enhanced version of psychoanalytic technique in the treatment of schizophrenia. Further data also suggest that psychoanalysis is not effective (and possibly even detrimental) in the treatment of sex offenders. Experiences of psychoanalysts and psychoanalytic psychotherapists and research into infant and child development have led to new insights. Theories have been further developed and the results of empirical research are now more integrated in the psychoanalytic theory.

There are different forms of psychoanalysis and psychotherapies in which psychoanalytic thinking is practiced. Besides classical psychoanalysis there is for example psychoanalytic psychotherapy. Other examples of well known therapies which also use insights of
psychoanalysis are Mentalization-Based Treatment (MBT), and Transference-Focused Psychotherapy (TFP). There is also a continuing influence of psychoanalytic thinking in different settings in the mental health care. To give an example: in the psychotherapeutic training in the Netherlands, psychoanalytic and system therapeutic theories, drafts, and techniques are combined and integrated. Other psychoanalytic schools include the Kleinian, Lacanian, and Winnicottian schools.

**Criticism**

Early critics of psychoanalysis believed that its theories were based too little on quantitative and experimental research, and too much on the clinical case study method. Some even accused Freud of fabrication, most famously in the case of Anna O. (Borch-Jacobsen 1996). An increasing amount of empirical research from academic psychologists and psychiatrists has begun to address this criticism. A survey of scientific research suggested that while personality traits corresponding to Freud's oral, anal, Oedipal, and genital phases can be observed, they do not necessarily manifest as stages in the development of children. These studies also have not confirmed that such traits in adults result from childhood experiences (Fisher & Greenberg, 1977, p. 399). However, these stages should not be viewed as crucial to modern psychoanalysis. What is crucial to modern psychoanalytic theory and practice is the power of the unconscious and the transference phenomenon.

Numerous studies have shown that its efficacy is related to the quality of the therapist, rather than the psychoanalytic school or technique or training, while a French 2004 report from INSERM (study removed by decision of the French Health Minister Douste-Blazy), says instead, that psychoanalysis therapy is far less effective than other psychotherapies (among which cognitive behavioral therapy).

The idea of "unconscious" is contested because human behavior can be observed while human mental activity has to be inferred. However, the unconscious is now a popular topic of study in the fields of experimental and social psychology (e.g., implicit attitude measures, fMRI, and PET scans, and other indirect tests). The idea of unconscious, and the transference phenomenon, have been widely researched and, it is claimed, validated in the fields of cognitive psychology and social psychology (Westen & Gabbard 2002), though a Freudian interpretation of unconscious mental activity is not held by the majority of cognitive psychologists. Recent developments in neuroscience have resulted in one side arguing that it has provided a biological basis for unconscious emotional processing in line with psychoanalytic theory i.e., neuropsychoanalysis (Westen & Gabbard 2002), while the other side argues that such findings make psychoanalytic theory obsolete and irrelevant.

Both Freud and psychoanalysis have been criticized in very extreme terms. Exchanges between critics and defenders of psychoanalysis have often been so heated that they have come to be characterized as the Freud Wars. Karl Popper argued that psychoanalysis is a pseudoscience because its claims are not testable and cannot be refuted; that is, they are not falsifiable. Karl Kraus, an Austrian satirist, was the subject of a book written by noted libertarian author Thomas Szasz. The book Anti-Freud: Karl Kraus’s Criticism of
Psychoanalysis and Psychiatry, originally published under the name Karl Kraus and the Soul Doctors, portrayed Kraus as a harsh critic of Sigmund Freud and of psychoanalysis in general. Other commentators, such as Edward Timms, author of Karl Kraus - Apocalyptic Satirist, have argued that Kraus respected Freud, though with reservations about the application of some of his theories, and that his views were far less black-and-white than Szasz suggests. Grünbaum argues that psychoanalytic based theories are falsifiable, but that the causal claims of psychoanalysis are unsupported by the available clinical evidence. A prominent academic in positive psychology wrote that "Thirty years ago, the cognitive revolution in psychology overthrew both Freud and the behaviorists, at least in academia. ... [T]hinking ... is not just a [result] of emotion or behavior. ... [E]motion is always generated by cognition, not the other way around.'

Michel Foucault and Gilles Deleuze claimed that the institution of psychoanalysis has become a center of power and that its confessional techniques resemble the Christian tradition. Jacques Lacan criticized the emphasis of some American and British psychoanalytical traditions on what he has viewed as the suggestion of imaginary "causes" for symptoms, and recommended the return to Freud. Together with Gilles Deleuze, Félix Guattari criticised the Oedipal structure. Luce Irigaray criticised psychoanalysis, employing Jacques Derrida’s concept of phallogocentrism to describe the exclusion of the woman from Freudian and Lacanian psychoanalytical theories.

Shlomo Kalo explains that Materialism that flourished in the 19th Century severely harmed religion and rejected whatever called spiritual. The institution of the confession priest in particular was badly damaged. The empty void that this institution left behind was swiftly occupied by the newborn psychoanalysis. In his writings Kalo claims that psychoanalysis basic approach is erroneous. It represents the mainline wrong assumptions that happiness is unreachable and that the natural desire of a human being is to exploit his fellow men for his own pleasure and benefit.

Freud’s psychoanalysis was criticized by his wife, Martha. René Laforgue reported Martha Freud saying, "I must admit that if I did not realize how seriously my husband takes his treatments, I should think that psychoanalysis is a form of pornography." To Martha there was something vulgar about psychoanalysis, and she dissociated herself from it. According to Marie Bonaparte, Martha was upset with her husband’s work and his treatment of sexuality.

Gilles Deleuze and Felix Guattari, in their 1972 work Anti-Oedipus, take the cases of Gérard Mendel, Bela Grunberger and Janine Chasseguet-Smirgel, prominent members of the most respected associations (IPa), to suggest that, traditionally, psychoanalysis enthusiastically embraces a police state:

E. Fuller Torrey, writing in Witchdoctors and Psychiatrists (1986), stated that psychoanalytic theories have no more scientific basis than the theories of traditional native healers, "witchdoctors" or modern "cult" alternatives such as est. Frank Cioffi, author of Freud and the Question of Pseudoscience, cites false claims of a sound scientific verification of the theory and its elements as the strongest basis for classifying the work of Freud and
his school as pseudoscience. Among philosophers, Karl Popper argued that Freud’s theory of the unconscious was not falsifiable and therefore not scientific. Popper did not object to the idea that some mental processes could be unconscious but to investigations of the mind that were not falsifiable. In other words, if it were possible to connect every conceivable experimental outcome with Freud’s theory of the unconscious mind, then no experiment could refute the theory. Noam Chomsky has also criticized psychoanalysis for lacking a scientific basis.

The philosopher Paul Ricoeur argued that psychoanalysis can be considered a type of textual interpretation or hermeneutics. Like cultural critics and literary scholars, Ricoeur contended, psychoanalysts spend their time interpreting the nuances of language. He classified psychoanalysis as a hermeneutics of suspicion. By this he meant that psychoanalysis searches for deception in language, and thereby destabilizes our usual reliance on clear, obvious meanings.

Jacques Derrida incorporated aspects of psychoanalytic theory into his theory of deconstruction in order to question what he called the 'metaphysics of presence’. Derrida also turns some of these ideas against Freud, to reveal tensions and contradictions in his work. For example, although Freud defines religion and metaphysics as displacements of the identification with the father in the resolution of the Oedipal complex, Derrida insists in The Postcard: From Socrates to Freud and Beyond that the prominence of the father in Freud's own analysis is itself indebted to the prominence given to the father in Western metaphysics and theology since Plato.

Some post-colonialists argue that psychoanalysis imposes a white, European model of human development on those without European heritage, hence they will argue Freud's theories are a form or instrument of intellectual imperialism.

**Id, ego and super-ego**

Id, ego and super-ego are the three parts of the psychic apparatus defined in Sigmund Freud’s structural model of the psyche; they are the three theoretical constructs in terms of whose activity and interaction mental life is described. According to this model of the psyche, the id is the set of uncoordinated instinctual trends; the ego is the organised, realistic part; and the super-ego plays the critical and moralising role.

Even though the model is "structural" and makes reference to an "apparatus", the id, ego and super-ego are functions of the mind rather than parts of the brain and do not correspond one-to-one with actual somatic structures of the kind dealt with by neuroscience.

The concepts themselves arose at a late stage in the development of Freud's thought: the "structural model" (which succeeded his "economic model" and "topographical model") was first discussed in his 1920 essay "Beyond the Pleasure Principle" and was formalised.
and elaborated upon three years later in his "The Ego and the Id". Freud's proposal was influenced by the ambiguity of the term "unconscious" and its many conflicting uses.

**Id**

The id comprises the unorganised part of the personality structure that contains the basic drives. The id acts according to the "pleasure principle", seeking to avoid pain or unpleasure aroused by increases in instinctual tension.

**The id is unconscious by definition:**

"It is the dark, inaccessible part of our personality, what little we know of it we have learned from our study of the dream-work and of the construction of neurotic symptoms, and most of that is of a negative character and can be described only as a contrast to the ego. We approach the id with analogies: we call it a chaos, a cauldron full of seething excitations... It is filled with energy reaching it from the instincts, but it has no organisation, produces no collective will, but only a striving to bring about the satisfaction of the instinctual needs subject to the observance of the pleasure principle."

**In the id,**

"contrary impulses exist side by side, without cancelling each other out...There is nothing in the id that could be compared with negation...nothing in the id which corresponds to the idea of time."

Developmentally, the id is anterior to the ego; i.e. the psychic apparatus begins, at birth, as an undifferentiated id, part of which then develops into a structured ego. Thus, the id:

"...contains everything that is inherited, that is present at birth, is laid down in the constitution — above all, therefore, the instincts, which originate from the somatic organisation, and which find a first psychical expression here (in the id) in forms unknown to us."

The mind of a newborn child is regarded as completely "id-ridden", in the sense that it is a mass of instinctive drives and impulses, and needs immediate satisfaction, a view which equates a newborn child with an id-ridden individual—often humorously—with this analogy: an alimentary tract with no sense of responsibility at either end.

The id is responsible for our basic drives, "knows no judgements of value: no good and evil, no morality...Instinctual cathexes seeking discharge — that, in our view, is all there is in the id." It is regarded as "the great reservoir of libido", the instinctive drive to create — the life instincts that are crucial to pleasurable survival. Alongside the life instincts came the death instincts — the death drive which Freud articulated relatively late in his career in "the hypothesis of a death instinct, the task of which is to lead organic life back into the inanimate state." For Freud, "the death instinct would thus seem to express itself — though probably only in part — as an instinct of destruction directed against the external world.
and other organisms.": through aggression. Freud considered that "the id, the whole person...originally includes all the instinctual impulses...the destructive instinct as well." as Eros or the life instincts.

**Ego**

The ego acts according to the reality principle; i.e. it seeks to please the id’s drive in realistic ways that will benefit in the long term rather than bringing grief. At the same time, Freud concedes that as the ego "attempts to mediate between id and reality, it is often obliged to cloak the Ucs. [Unconscious] commands of the id with its own Pcs. [Preconscious] rationalizations, to conceal the id’s conflicts with reality, to profess...to be taking notice of reality even when the id has remained rigid and unyielding."

The ego comprises that organised part of the personality structure that includes defensive, perceptual, intellectual-cognitive, and executive functions. Conscious awareness resides in the ego, although not all of the operations of the ego are conscious. Originally, Freud used the word ego to mean a sense of self; but later revised it to mean a set of psychic functions such as judgment, tolerance, reality testing, control, planning, defence, synthesis of information, intellectual functioning, and memory. The ego separates out what is real. It helps us to organise our thoughts and make sense of them and the world around us."The ego is that part of the id which has been modified by the direct influence of the external world ... The ego represents what may be called reason and common sense, in contrast to the id, which contains the passions ... in its relation to the id it is like a man on horseback, who has to hold in check the superior strength of the horse; with this difference, that the rider tries to do so with his own strength, while the ego uses borrowed forces." Still worse, "it serves three severe masters...the external world, the super-ego and the id." Its task is to find a balance between primitive drives and reality while satisfying the id and super-ego. Its main concern is with the individual's safety and allows some of the id’s desires to be expressed, but only when consequences of these actions are marginal. "Thus the ego, driven by the id, confined by the super-ego, repulsed by reality, struggles...[in] bringing about harmony among the forces and influences working in and upon it," and readily "breaks out in anxiety — realistic anxiety regarding the external world, moral anxiety regarding the super-ego, and neurotic anxiety regarding the strength of the passions in the id." It has to do its best to suit all three, thus is constantly feeling hemmed by the danger of causing discontent on two other sides. It is said, however, that the ego seems to be more loyal to the id, preferring to gloss over the finer details of reality to minimize conflicts while pretending to have a regard for reality. But the super-ego is constantly watching every one of the ego’s moves and punishes it with feelings of guilt, anxiety, and inferiority.

To overcome this the ego employs defense mechanisms. The defense mechanisms are not done so directly or consciously. They lessen the tension by covering up our impulses that are threatening. Ego defense mechanisms are often used by the ego when id behavior conflicts with reality and either society’s morals, norms, and taboos or the individual’s expectations as a result of the internalisation of these morals, norms, and their taboos.
Denial, displacement, intellectualisation, fantasy, compensation, projection, rationalisation, reaction formation, regression, repression, and sublimation were the defense mechanisms Freud identified. However, his daughter Anna Freud clarified and identified the concepts of undoing, suppression, dissociation, idealisation, identification, introjection, inversion, somatisation, splitting, and substitution.

"The ego is not sharply separated from the id; its lower portion merges into it... But the repressed merges into the id as well, and is merely a part of it. The repressed is only cut off sharply from the ego by the resistances of repression; it can communicate with the ego through the id." (Sigmund Freud, 1923)

In a diagram of the Structural and Topographical Models of Mind, the ego is depicted to be half in the consciousness, while a quarter is in the preconscious and the other quarter lies in the unconscious.

In modern English, ego has many meanings. It could mean one’s self-esteem, an inflated sense of self-worth, or in philosophical terms, one’s self. Ego development is known as the development of multiple processes, cognitive function, defenses, and interpersonal skills or to early adolescence when ego processes are emerged.

**Super-ego**

Freud developed his concept of the super-ego from an earlier combination of the ego ideal and the "special psychical agency which performs the task of seeing that narcissistic satisfaction from the ego ideal is ensured...what we call our 'conscience'." For him "the installation of the super-ego can be described as a successful instance of identification with the parental agency," while as development proceeds "the super-ego also takes on the influence of those who have stepped into the place of parents — educators, teachers, people chosen as ideal models."

The super-ego aims for perfection. It comprises that organised part of the personality structure, mainly but not entirely unconscious, that includes the individual’s ego ideals, spiritual goals, and the psychic agency (commonly called "conscience") that criticises and prohibits his or her drives, fantasies, feelings, and actions. "The Super-ego can be thought
of as a type of conscience that punishes misbehavior with feelings of guilt. For example, for having extra-marital affairs."

The super-ego works in contradiction to the id. The super-ego strives to act in a socially appropriate manner, whereas the id just wants instant self-gratification. The super-ego controls our sense of right and wrong and guilt. It helps us fit into society by getting us to act in socially acceptable ways.
The super-ego's demands oppose the id's, so the ego has a hard time in reconciling the two.

Freud's theory implies that the super-ego is a symbolic internalisation of the father figure and cultural regulations. The super-ego tends to stand in opposition to the desires of the id because of their conflicting objectives, and its aggressiveness towards the ego. The super-ego acts as the conscience, maintaining our sense of morality and proscription from taboos.
The super-ego and the ego are the product of two key factors: the state of helplessness of the child and the Oedipus complex. Its formation takes place during the dissolution of the Oedipus complex and is formed by an identification with and internalisation of the father figure after the little boy cannot successfully hold the mother as a love-object out of fear of castration.

"The super-ego retains the character of the father, while the more powerful the Oedipus complex was and the more rapidly it succumbed to repression (under the influence of authority, religious teaching, schooling and reading), the stricter will be the domination of the super-ego over the ego later on—in the form of conscience or perhaps of an unconscious sense of guilt."
—Freud, The Ego and the Id (1923)

The concept of super-ego and the Oedipus complex is subject to criticism for its perceived sexism. Women, who are considered to be already castrated, do not identify with the father, and therefore, for Freud, "their super-ego is never so inexorable, so impersonal, so independent of its emotional origins as we require it to be in men...they are often more influenced in their judgements by feelings of affection or hostility." He went on however to modify his position to the effect "that the majority of men are also far behind the masculine ideal and that all human individuals, as a result of their bisexual disposition and of cross-inheritance, combine in themselves both masculine and feminine characteristics."

In Sigmund Freud's work Civilization and Its Discontents (1930) he also discusses the concept of a "cultural super-ego". Freud suggested that the demands of the super-ego "coincide with the precepts of the prevailing cultural super-ego. At this point the two processes, that of the cultural development of the group and that of the cultural development of the individual, are, as it were, always interlocked." Ethics are a central element in the demands of the cultural super-ego, but Freud (as analytic moralist) protested against what he called "the unpsychological proceedings of the cultural super-ego...the ethical demands of the cultural super-ego. It does not trouble itself enough about the facts of the mental constitution of human beings."
Advantages of the structural model

Freud’s earlier, topographical model of the mind had divided the mind into the three elements of conscious, preconscious, and unconscious. At its heart was "the dialectic of unconscious traumatic memory versus consciousness...which soon became a conflict between System Ucs versus System Cs." With what Freud called the "disagreeable discovery that on the one hand (super-)ego and conscious and on the other hand repressed and unconscious are far from coinciding," Freud took the step in the structural model to "no longer use the term 'unconscious' in the systematic sense," and to rename "the mental region that is foreign to the ego...[and] in future call it the 'id'." The partition of the psyche defined in the structural model is thus one that cuts across the topographical model’s partition of "conscious vs. unconscious".

"The new terminology which he introduced has a highly clarifying effect and so made further clinical advances possible." Its value lies in the increased degree of precision and diversification made possible: Although the id is unconscious by definition, the ego and the super-ego are both partly conscious and partly unconscious. What is more, with this new model Freud achieved a more systematic classification of mental disorder than had been available previously:

"Transference neuroses correspond to a conflict between the ego and the id; narcissistic neuroses, to a conflict between the ego and the superego; and psychoses, to one between the ego and the external world."

—Freud, Neurosis and Psychosis (1923)

It is important to realise however "the three newly presented entities, the id, the ego and the superego, all had lengthy past histories (two of them under other names)" — the id as the systematic unconscious, the super-ego as conscience/ego ideal. Equally, Freud never abandoned the topographical division of conscious, preconscious, and unconscious, though as he noted ruefully "the three qualities of consciousness and the three provinces of the mental apparatus do not fall together into three peaceful couples...we had no right to expect any such smooth arrangement."

Libido

Libido refers to a person’s sex drive or desire for sexual activity. The desire for sex is an aspect of a person’s sexuality, but varies enormously from one person to another, and it also varies depending on circumstances at a particular time. A person who has extremely frequent or a suddenly increased sex drive may be experiencing hypersexuality. Sex drive has usually biological, psychological, and social components. Biologically, levels of hormones such as testosterone are believed to affect sex drive; social factors, such as work and family, also have an impact; as do internal psychological factors, like personality and stress. There is no measure of what is a healthy level for sex. Sex drive may be affected by medical conditions, medications, lifestyle and relationship issues.
There is no necessary correlation between the desire for sex and actual sexual activity. For example, a person may have a desire for sex but not have the opportunity to act on that desire, or may on personal, moral or religious reasons refrain from acting on the urge. Psychologically, a person’s urge can be repressed or sublimated. On the other hand, a person can engage in sexual activity without an actual desire for it.

The concept of libido was first introduced by Sigmund Freud as the instinct energy or force, contained in what Freud called the id. Carl Jung defined libido as the free creative or psychic energy an individual has to put toward personal development or individuation. Within the category of sexual behavior, libido would fall under the appetitive phase wherein an individual will usually undergo certain behaviors in order to gain access to a mate.

**History of the concept**

Sigmund Freud popularized the term and defined libido as the instinct energy or force, contained in what Freud called the id, the largely unconscious structure of the psyche. Building on the work of Karl Abraham, Freud developed the idea of a series of developmental phases in which the libido fixates on different erogenous zones—first in the oral stage (exemplified by an infant’s pleasure in nursing), then in the anal stage (exemplified by a toddler’s pleasure in controlling his or her bowels), then in the phallic stage, through a latency stage in which the libido is dormant, to its reemergence at puberty in the genital stage. Freud pointed out that these libidinal drives can conflict with the conventions of civilized behavior, represented in the psyche by the superego. It is this need to conform to society and control the libido that leads to tension and disturbance in the individual, prompting the use of ego defenses to dissipate the psychic energy of these unmet and mostly unconscious needs into other forms. Excessive use of ego defenses results in neurosis. A primary goal of psychoanalysis is to bring the drives of the id into consciousness, allowing them to be met directly and thus reducing the patient’s reliance on ego defenses.

Freud viewed libido as passing through a series of developmental stages within the individual. Failure to adequately adapt to the demands of these different stages could result in libidinal energy becoming 'dammed up' or fixated in these stages, producing certain pathological character traits in adulthood. Thus the psychopathologized individual for Freud was an immature individual, and the goal of psychoanalysis was to bring these fixations to conscious awareness so that the libido energy would be freed up and available for conscious use in some sort of constructive sublimation.

According to Swiss psychiatrist Carl Gustav Jung, the libido is identified as psychic energy. Duality (opposition) that creates the energy (or libido) of the psyche, which Jung asserts expresses itself only through symbols: "It is the energy that manifests itself in the life process and is perceived subjectively as striving and desire." (Ellenberger, 697)

Defined more narrowly, libido also refers to an individual’s urge to engage in sexual activity. In this sense, the antonym of libido is destrudo.
More recently, philosopher and psychologist James Giles has argued that human sexual desire is neither a biological instinct nor something learned or constructed by culture. According to Giles' theory of sexual desire it is an existential need based on the awareness of having a gender. Having a gender creates a sense of incompleteness. We then seek to fill this incompleteness through the baring and caressing of the desired gender.

**Cathexis**

In psychoanalysis, cathexis is defined as the process of investment of mental or emotional energy in a person, object, or idea. The Greek term cathexis (καθέξις) was chosen by James Strachey to render the German term Besetzung in his translation of Sigmund Freud's complete works. For Freud, cathexis is defined as an investment of libido. Freud often described the functioning of psychosexual energies in mechanical terms, influenced perhaps by the dominance of the steam engine at the end of the 19th century.

Freud often represented frustration in libidinal desires as a blockage of energies that have, or would eventually build up and require release in alternative ways. This release could occur, for example, by way of regression and the "re-cathecting" of former positions, that is, fixation at the oral phase or anal phase and the enjoyment of former sexual objects ("object-cathexes"), including autoeroticism.

When the ego blocks such efforts to discharge one's cathexis by way of regression, that is, when the ego wishes to repress such desires, Freud uses the term "anti-cathexis" or counter-charge. Like a steam engine, the libido's cathexis then builds up until it finds alternative outlets, which can lead to sublimation or to the formation of sometimes disabling symptoms.

**Defence mechanism**

In Freudian psychoanalytic theory, defense mechanisms are unconscious psychological strategies brought into play by various entities to cope with reality and to maintain self-image. Healthy persons normally use different defenses throughout life. An ego defense mechanism becomes pathological only when its persistent use leads to maladaptive behavior such that the physical and/or mental health of the individual is adversely affected. The purpose of ego defense mechanisms is to protect the mind/self/ego from anxiety, social sanctions or to provide a refuge from a situation with which one cannot currently cope.

They are more accurately referred to as ego defense mechanisms, and can thus be categorized as occurring when the id impulses are in conflict with each other, when the id impulses conflict with super-ego values and beliefs, and when an external threat is posed to the ego.
The term "defense mechanism" is often thought to refer to a definitive singular term for personality traits which arise due to loss or traumatic experiences, but more accurately refers to several types of reactions which were identified during and after daughter Anna Freud’s time.

Defense mechanisms are sometimes confused with coping strategies.

**Structural model: The id, ego, and superego**

The concept of id impulses comes from Sigmund Freud's structural model. According to this theory, id impulses are based on the pleasure principle: instant gratification of one's own desires and needs. Sigmund Freud believed that the id represents biological instinctual impulses in ourselves, such as aggression (Thanatos or the Death instinct) and sexuality (Eros or the Life instinct). For example, when the id impulses (e.g. desire to have sexual relations with a stranger) conflict with the superego (e.g. belief in societal conventions of not having sex with unknown persons), unsatisfied feelings of anxiousness or feelings of anxiety come to the surface. To reduce these negative feelings, the ego might use defense mechanisms (conscious or unconscious blockage of the id impulses).

Freud also believed that conflicts between these two structures resulted in conflicts associated with psychosexual stages.
Definitions of individual psyche structures

Freud proposed three structures of the psyche or personality:

- **Id**: a selfish, primitive, childish, pleasure-oriented part of the personality with no ability to delay gratification.
- **Superego**: internalized societal and parental standards of "good" and "bad", "right" and "wrong" behavior.
- **Ego**: the moderator between the id and superego which seeks compromises to pacify both. It can be viewed as our "sense of time and place".

Primary and secondary processes

In the ego, there are two ongoing processes. First there is the unconscious primary process, where the thoughts are not organized in a coherent way, the feelings can shift, contradictions are not in conflict or are just not perceived that way, and condensations arise. There is no logic and no time line. Lust is important for this process. By contrast, there is the conscious secondary process, where strong boundaries are set and thoughts must be organized in a coherent way. Most conscious thoughts originate here.

The reality principle

Id impulses are not appropriate in civilized society, so society presses us to modify the pleasure principle in favor of the reality principle, that is, the requirements of the external world.

Formation of the superego

The superego forms as the child grows and learns parental and social standards. The superego consists of two structures: the conscience, which stores information about what is "bad" and what has been punished and the ego ideal, which stores information about what is "good" and what one "should" do or be.

The ego’s use of defense mechanisms

When anxiety becomes too overwhelming, it is then the place of the ego to employ defense mechanisms to protect the individual. Feelings of guilt, embarrassment and shame often accompany the feeling of anxiety. In the first definitive book on defense mechanisms, The Ego and the Mechanisms of Defense (1936), Anna Freud introduced the concept of signal anxiety; she stated that it was "not directly a conflicted instinctual tension but a signal occurring in the ego of an anticipated instinctual tension". The signaling function of anxiety is thus seen as a crucial one and biologically adapted to warn the organism of danger or a threat to its equilibrium. The anxiety is felt as an increase in bodily or mental tension and the signal that the organism receives in this way allows it the possibility of taking defensive
action towards the perceived danger. Defense mechanisms work by distorting the id impulses into acceptable forms, or by unconscious or conscious blockage of these impulses.

**Theories and classifications**

The list of defense mechanisms is huge and there is no theoretical consensus on the number of defense mechanisms. Classifying defense mechanisms according to some of their properties (i.e. underlying mechanisms, similarities or connections with personality) has been attempted. Different theorists have different categorizations and conceptualizations of defense mechanisms. Large reviews of theories of defense mechanisms are available from Paulhus, Fridhandler and Hayes (1997) and Cramer (1991). The Journal of Personality published a special issue on defense mechanisms (1998).

Otto F. Kernberg (1967) developed a theory of borderline personality organization of which one consequence may be borderline personality disorder. His theory is based on ego psychological object relations theory. Borderline personality organization develops when the child cannot integrate positive and negative mental objects together. Kernberg views the use of primitive defense mechanisms as central to this personality organization. Primitive psychological defenses are projection, denial, dissociation or splitting and they are called borderline defense mechanisms. Also, devaluation and projective identification are seen as borderline defenses.

In George Eman Vaillant's (1977) categorization, defenses form a continuum related to their psychoanalytical developmental level. Vaillant's levels are:

- **Level I** - pathological defenses (i.e. psychotic denial, delusional projection)
- **Level II** - immature defenses (i.e. fantasy, projection, passive aggression, acting out)
- **Level III** - neurotic defenses (i.e. intellectualization, reaction formation, dissociation, displacement, repression)
- **Level IV** - mature defenses (i.e. humor, sublimation, suppression, altruism, anticipation)

Robert Plutchik's (1979) theory views defenses as derivatives of basic emotions. Defense mechanisms in his theory are (in order of placement in circumplex model): reaction formation, denial, repression, regression, compensation, projection, displacement, intellectualization.

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) published by the American Psychiatric Association (1994) includes a tentative diagnostic axis for defense mechanisms. This classification is largely based on Vaillant's hierarchical view of defenses, but has some modifications. Examples include: denial, fantasy, rationalization, regression, isolation, projection, and displacement.

**Vaillant's categorization of defense mechanisms**
Level 1 - Pathological

The mechanisms on this level, when predominating, almost always are severally pathological. These four defenses, in conjunction, permit one to effectively rearrange external experiences to eliminate the need to cope with reality. The pathological users of these mechanisms frequently appear irrational or insane to others. These are the "psychotic" defenses, common in overt psychosis. However, they are found in dreams and throughout childhood as well.

They include:

- **Delusional Projection**: Grossly frank delusions about external reality, usually of a persecutory nature.
- **Denial**: Refusal to accept external reality because it is too threatening; arguing against an anxiety-provoking stimulus by stating it doesn't exist; resolution of emotional conflict and reduction of anxiety by refusing to perceive or consciously acknowledge the more unpleasant aspects of external reality.
- **Distortion**: A gross reshaping of external reality to meet internal needs.
- **Splitting**: A primitive defense. Negative and positive impulses are split off and unintegrated. Fundamental example: An individual views other people as either innately good or innately evil, rather than a whole continuous being.
- **Extreme projection**: The blatant denial of a moral or psychological deficiency, which is perceived as a deficiency in another individual or group.

Level 2 - Immature

These mechanisms are often present in adults and more commonly present in adolescents. These mechanisms lessen distress and anxiety provoked by threatening people or by uncomfortable reality. People who excessively use such defenses are seen as socially undesirable in that they are immature, difficult to deal with and seriously out of touch with reality. These are the so-called "immature" defenses and overuse almost always leads to serious problems in a person's ability to cope effectively. These defenses are often seen in severe depression and personality disorders. In adolescence, the occurrence of all of these defenses is normal.

They include:

- **Acting out**: Direct expression of an unconscious wish or impulse in action, without conscious awareness of the emotion that drives that expressive behavior.
- **Fantasy**: Tendency to retreat into fantasy in order to resolve inner and outer conflicts.
- **Idealization**: Unconsciously choosing to perceive another individual as having more positive qualities than he or she may actually have.
- **Passive aggression**: Aggression towards others expressed indirectly or passively such as using procrastination.
- **Projection**: Projection is a primitive form of paranoia. Projection also reduces anxiety by allowing the expression of the undesirable impulses or desires without becoming consciously aware of them; attributing one's own unacknowledged unacceptable/unwanted thoughts and emotions to another; includes severe prejudice, severe jealousy, hypervigilance to external danger, and "injustice collecting". It is shifting one's unacceptable thoughts, feelings and impulses within oneself onto someone else, such that those same thoughts, feelings, beliefs and motivations are perceived as being possessed by the other.

- **Projective identification**: The object of projection invokes in that person precisely the thoughts, feelings or behaviors projected.

- **Somatization**: The transformation of negative feelings towards others into negative feelings toward self, pain, illness, and anxiety.

**Level 3 - Neurotic**

These mechanisms are considered neurotic, but fairly common in adults. Such defenses have short-term advantages in coping, but can often cause long-term problems in relationships, work and in enjoying life when used as one's primary style of coping with the world.

They include:

- **Displacement**: Defense mechanism that shifts sexual or aggressive impulses to a more acceptable or less threatening target; redirecting emotion to a safer outlet; separation of emotion from its real object and redirection of the intense emotion toward someone or something that is less offensive or threatening in order to avoid dealing directly with what is frightening or threatening. For example, a mother may yell at her child because she is angry with her husband.

- **Dissociation**: Temporary drastic modification of one's personal identity or character to avoid emotional distress; separation or postponement of a feeling that normally would accompany a situation or thought.

- **Hypochondriasis**: An excessive preoccupation or worry about having a serious illness.

- **Intellectualization**: A form of isolation; concentrating on the intellectual components of a situation so as to distance oneself from the associated anxiety-provoking emotions; separation of emotion from ideas; thinking about wishes in formal, affectively bland terms and not acting on them; avoiding unacceptable emotions by focusing on the intellectual aspects (e.g. isolation, rationalization, ritual, undoing, compensation, magical thinking).

- **Isolation**: Separation of feelings from ideas and events, for example, describing a murder with graphic details with no emotional response.

- **Rationalization** (making excuses): Where a person convinces him or herself that no wrong was done and that all is or was all right through faulty and false reasoning. An indicator of this defense mechanism can be seen socially as the formulation of convenient excuses - making excuses.
- **Reaction formation**: Converting unconscious wishes or impulses that are perceived to be dangerous into their opposites; behavior that is completely opposite of what one really wants or feels; taking the opposite belief because the true belief causes anxiety. This defense can work effectively for coping in the short term, but will eventually break down.

- **Regression**: Temporary reversion of the ego to an earlier stage of development rather than handling unacceptable impulses in a more adult way.

- **Repression**: The process of attempting to repel desires towards pleasurable instincts, caused by a threat of suffering if the desire is satisfied; the desire is moved to the unconscious in the attempt to prevent it from entering consciousness; seemingly unexplainable naivety, memory lapse or lack of awareness of one's own situation and condition; the emotion is conscious, but the idea behind it is absent.

- **Undoing**: A person tries to 'undo' an unhealthy, destructive or otherwise threatening thought by engaging in contrary behavior.

- **Withdrawal**: Withdrawal is a more severe form of defense. It entails removing oneself from events, stimuli, interactions, etc... that could remind one of painful thoughts and feelings.

**Level 4 - Mature**

These are commonly found among emotionally healthy adults and are considered mature, even though many have their origins in an immature stage of development. They have been adapted through the years in order to optimize success in life and relationships. The use of these defenses enhances pleasure and feelings of control. These defenses help us integrate conflicting emotions and thoughts, while still remaining effective. Those who use these mechanisms are usually considered virtuous.

They include:

- **Altruism**: Constructive service to others that brings pleasure and personal satisfaction.

- **Anticipation**: Realistic planning for future discomfort.

- **Humor**: Overt expression of ideas and feelings (especially those that are unpleasant to focus on or too terrible to talk about) that gives pleasure to others. The thoughts retain a portion of their innate distress, but they are "skirted round" by witticism.

- **Identification**: The unconscious modeling of one's self upon another person's character and behavior.

- **Introjection**: Identifying with some idea or object so deeply that it becomes a part of that person.

- **Sublimation**: Transformation of negative emotions or instincts into positive actions, behavior, or emotion.

- **Thought suppression**: The conscious process of pushing thoughts into the preconscious; the conscious decision to delay paying attention to an emotion or need in order to cope with the present reality; making it possible to later access uncomfortable or distressing emotions while accepting them.
Psychosexual development

In Freudian psychology, psychosexual development is a central element of the psychoanalytic sexual drive theory, that human beings, from birth, possess an instinctual libido (sexual appetite) that develops in five stages. Each stage — the oral, the anal, the phallic, the latent, and the genital — is characterized by the erogenous zone that is the source of the libidinal drive. Sigmund Freud proposed that if the child experienced anxiety, thwarting his or her sexual appetite during any libidinal (psychosexual) development stage, said anxiety would persist into adulthood as a neurosis, a functional mental disorder.

Background

The neurologist Sigmund Freud (ca. 1921)

Sigmund Freud (1856–1939) observed that during the predictable stages of early childhood development, the child's behavior is oriented towards certain parts of his or her body, e.g. the mouth during breast-feeding, the anus during toilet-training. He proposed that adult neurosis (functional mental disorder) often is rooted in childhood sexuality, therefore, said neurotic adult behaviors were manifestations of childhood sexual fantasy and desire. That because human beings are born "polymorphously perverse", infants can derive sexual pleasure from any part of their bodies, and that socialization directs the instinctual libidinal drives into adult heterosexuality. Given the predictable timeline of childhood behavior, he proposed "libido development" as a model of normal childhood sexual development, wherein the child progresses through five psychosexual stages — (i) the oral, (ii) the anal, (iii) the phallic, (iv) the latent, and (v) the genital — in which the source pleasure is in a different erogenous zone.

Freudian psychosexual development

Sexual infantilism — In pursuing and satisfying his or her libido (sexual drive), the child might experience failure (parental and societal disapproval) and thus might associate anxiety with the given erogenous zone. To avoid anxiety, the child becomes fixated, preoccupied with the psychologic themes related to the erogenous zone in question, which persist into adulthood, and underlie the personality and psychopathology of the man or woman, as neurosis, hysteria, personality disorders, et cetera.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Age Range</th>
<th>Erogenous zone</th>
<th>Consequences of psychologic fixation</th>
</tr>
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</table>
| Oral  | Birth–1 year | Mouth         | Orally aggressive: chewing gum and the ends of pencils, etc.  
Orally Passive: smoking, eating, kissing, oral sexual practices  
Oral stage fixation might result in a passive, gullible, immature, manipulative personality. |
| Anal  | 1–3 years | Bowel and     | Anal retentive: Obsessively organized, or |

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<table>
<thead>
<tr>
<th>Stage</th>
<th>Period</th>
<th>Focus</th>
<th>Qualities</th>
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<tbody>
<tr>
<td>Phallic</td>
<td>3–6 years</td>
<td>Genitalia</td>
<td>Oedipus complex (in boys)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Electra complex (in girls)</td>
</tr>
<tr>
<td>Latency</td>
<td>6–puberty</td>
<td>Dormant sexual feelings</td>
<td>Sexual unfulfillment if fixation occurs in this stage.</td>
</tr>
<tr>
<td>Genital</td>
<td>Puberty–death</td>
<td>Sexual interests mature</td>
<td>Frigidity, impotence, unsatisfactory relationships.</td>
</tr>
</tbody>
</table>

The first stage of psychosexual development is the oral stage, spanning from birth until the age of two years, wherein the infant’s mouth is the focus of libidinal gratification derived from the pleasure of feeding at the mother’s breast, and from the oral exploration of his or her environment, i.e. the tendency to place objects in the mouth. The id dominates, because neither the ego nor the super ego is yet fully developed, and, since the infant has no personality (identity), every action is based upon the pleasure principle. Nonetheless, the infantile ego is forming during the oral stage; two factors contribute to its formation: (i) in developing a body image, he or she is discrete from the external world, e.g. the child understands pain when it is applied to his or her body, thus identifying the physical boundaries between body and environment; (ii) experiencing delayed gratification leads to understanding that specific behaviors satisfy some needs, e.g. crying gratifies certain needs.

Weaning is the key experience in the infant’s oral stage of psychosexual development, his or her first feeling of loss consequent to losing the physical intimacy of feeding at mother’s breast. Yet, weaning increases the infant’s self-awareness that he or she does not control the environment, and thus learns of delayed gratification, which leads to the formation of the capacities for independence (awareness of the limits of the self) and trust (behaviors leading to gratification). Yet, thwarting of the oral-stage — too much or too little gratification of desire — might lead to an oral-stage fixation, characterised by passivity, gullibility, immaturity, unrealistic optimism, which is manifested in a manipulative personality consequent to ego malformation. In the case of too much gratification, the child does not learn that he or she does not control the environment, and that gratification is not always immediate, thereby forming an immature personality. In the case of too little gratification, the infant might become passive upon learning that gratification is not forthcoming, despite having produced the gratifying behavior.

**Anal stage**

The second stage of psychosexual development is the anal stage, spanning from the age of fifteen months to three years, wherein the infant’s erogenous zone changes from the mouth (the upper digestive tract) to the anus (the lower digestive tract), while the ego formation
continues. Toilet training is the child’s key anal-stage experience, occurring at about the age of two years, and results in conflict between the Id (demanding immediate gratification) and the Ego (demanding delayed gratification) in eliminating bodily wastes, and handling related activities (e.g. manipulating excrement, coping with parental demands). The style of parenting influences the resolution of the Id-Ego conflict, which can be either gradual and psychologically uneventful, or which can be sudden and psychologically traumatic. The ideal resolution of the Id-Ego conflict is in the child’s adjusting to moderate parental demands that teach the value and importance of physical cleanliness and environmental order, thus producing a self-controlled adult. Yet, if the parents make immoderate demands of the child, by over-emphasizing toilet training, it might lead to the development of a compulsive personality, a person too concerned with neatness and order. If the child obeys the Id, and the parents yield, he or she might develop a self-indulgent personality characterized by personal slovenliness and environmental disorder. If the parents respond to that, the child must comply, but might develop a weak sense of Self, because it was the parents’ will, and not the child’s ego, who controlled the toilet training.

**Phallic stage**

The third stage of psychosexual development is the phallic stage, spanning the ages of three to six years, wherein the child’s genitalia are his or her primary erogenous zone. It is in this third infantile development stage that children become aware of their bodies, the bodies of other children, and the bodies of their parents; they gratify physical curiosity by undressing and exploring each other and their genitals, and so learn the physical (sexual) differences between "male" and "female" and the gender differences between "boy" and "girl". In the phallic stage, a boy’s decisive psychosexual experience is the Oedipus complex, his son–father competition for possession of mother. This psychological complex derives from the 5th-century BC Greek mythologic character Oedipus, who unwittingly killed his father, Laius, and sexually possessed his mother, Jocasta. Analogously, in the phallic stage, a girl's decisive psychosexual experience is the Electra complex, her daughter–mother competition for psychosexual possession of father. This psychological complex derives from the 5th-century BC Greek mythologic Electra, who plotted matricidal revenge with Orestes, her brother, against Clytemnestra, their mother, and Aegisthus, their stepfather, for their murder of Agamemnon, their father, (cf. Electra, by Sophocles).

Initially, Freud equally applied the Oedipus complex to the psychosexual development of boys and girls, but later developed the female aspects of the theory as the feminine Oedipus attitude and the negative Oedipus complex; yet, it was his student–collaborator, Carl Jung, who coined the term Electra complex in 1913. Nonetheless, Freud rejected Jung’s term as psychoanalytically inaccurate: "that what we have said about the Oedipus complex applies with complete strictness to the male child only, and that we are right in rejecting the term 'Electra complex', which seeks to emphasize the analogy between the attitude of the two sexes".

**Oedipus** — Despite mother being the parent who primarily gratifies the child’s desires, the child begins forming a discrete sexual identity — "boy", "girl" — that alters the dynamics of
the parent and child relationship; the parents become the focus of infantile libidinal energy. The boy focuses his libido (sexual desire) upon his mother, and focuses jealousy and emotional rivalry against his father — because it is he who sleeps with mother. To facilitate uniting him with his mother, the boy's id wants to kill father (as did Oedipus), but the ego, pragmatically based upon the reality principle, knows that the father is the stronger of the two males competing to possess the one female. Nevertheless, the boy remains ambivalent about his father's place in the family, which is manifested as fear of castration by the physically greater father; the fear is an irrational, subconscious manifestation of the infantile Id.

Electra — Whereas boys develop castration anxiety, girls develop penis envy that is rooted in anatomic fact: without a penis, she cannot sexually possess mother, as the infantile id demands. Resultantly, the girl redirects her desire for sexual union upon father; thus, she progresses towards heterosexual femininity that culminates in bearing a child who replaces the absent penis. Moreover, after the phallic stage, the girl's psychosexual development includes transferring her primary erogenous zone from the infantile clitoris to the adult vagina. Freud thus considered a girl's Oedipal conflict to be more emotionally intense than that of a boy, resulting, potentially, in a submissive woman of insecure personality.

Psychologic defense — In both sexes, defense mechanisms provide transitory resolutions of the conflict between the drives of the Id and the drives of the Ego. The first defense mechanism is repression, the blocking of memories, emotional impulses, and ideas from the conscious mind; yet it does not resolve the Id-Ego conflict. The second defense mechanism is identification, by which the child incorporates, to his or her ego, the personality characteristics of the same-sex parent; in so adapting, the boy diminishes his castration anxiety, because his likeness to father protects him from father's wrath as a rival for mother; by so adapting, the girl facilitates identifying with mother, who understands that, in being females, neither of them possesses a penis, and thus they are not antagonists.

Dénouement — Unresolved psychosexual competition for the opposite-sex parent might produce a phallic-stage fixation leading a girl to become a woman who continually strives to dominate men (viz. penis envy), either as an unusually seductive woman (high self-esteem) or as an unusually submissive woman (low self-esteem). In a boy, a phallic-stage fixation might lead him to become an aggressive, over-ambitious, vain man. Therefore, the satisfactory parental handling and resolution of the Oedipus complex and of the Electra complex are most important in developing the infantile super-ego, because, by identifying with a parent, the child internalizes morality, thereby, choosing to comply with societal rules, rather than having to reflexively comply in fear of punishment.

Latency stage

The fourth stage of psychosexual development is the latency stage that spans from the age of six years until puberty, wherein the child consolidates the character habits he or she developed in the three, earlier stages of psychologic and sexual development. Whether or not the child has successfully resolved the Oedipal conflict, the instinctual drives of the id
are inaccessible to the Ego, because his or her defense mechanisms repressed them during the phallic stage. Hence, because said drives are latent (hidden) and gratification is delayed — unlike during the preceding oral, anal, and phallic stages — the child must derive the pleasure of gratification from secondary process-thinking that directs the libidinal drives towards external activities, such as schooling, friendships, hobbies, et cetera. Any neuroses established during the fourth, latent stage, of psychosexual development might derive from the inadequate resolution either of the Oedipus conflict or of the Ego’s failure to direct his or her energies towards socially acceptable activities.

**Genital stage**

The fifth stage of psychosexual development is the genital stage that spans puberty and adult life, and thus occupies most of the life of a man and of a woman; its purpose is the psychologic detachment and independence from the parents. The genital stage affords the person the ability to confront and resolve his or her remaining psychosexual childhood conflicts. As in the phallic stage, the genital stage is centered upon the genitalia, but the sexuality is consensual and adult, rather than solitary and infantile. The psychological difference between the phallic and genital stages is that the ego is established in the latter; the person’s concern shifts from primary-drive gratification (instinct) to applying secondary process-thinking to gratify desire symbolically and intellectually by means of friendships, a love relationship, family and adult responsibilities.

**Criticism**

**Feminist**

Contemporaneously, Sigmund Freud’s psychosexual development theory is criticized as sexist, because it was informed with his introspection (self-analysis). To integrate the female libido (sexual desire) to psychosexual development, he proposed that girls develop "penis envy". In response, the German Neo-Freudian psychoanalyst Karen Horney, counter-proposed that girls instead develop "Power envy", rather than penis envy. She further proposed the concept of "womb and vagina envy", the male's envy of the female ability to bear children; yet, contemporary formulations further develop said envy from the biologic (child-bearing) to the psychologic (nurturance), envy of women's perceived right to be the kind parent.

**Scientific**

A usual criticism of the scientific (experimental) validity of the Freudian psychology theory of human psychosexual development is that Sigmund Freud (1856–1939) was personally fixated upon human sexuality, therefore, he favored defining human development with a normative theory of psychologic and sexual development. Hence, the phallic stage proved controversial, for being based upon clinical observations of the Oedipus complex.

In Analysis of a Phobia in a Five-year-old Boy (1909), the case study of the boy "Little Hans" (Herbert Graf, 1903–73) who was afflicted with equinophobia. The relation between Hans's
fears — of horses and of father — derived from external factors, the birth of a sister, and internal factors, the desire of the infantile id to replace father as companion to mother, and guilt for enjoying the masturbation normal to a boy of his age. Moreover, his admitting to wanting to procreate with mother was considered proof of the boy’s sexual attraction to the opposite-sex parent; he was a heterosexual male. Yet, the boy Hans was unable to relate fearing horses to fearing his father. The psychoanalyst Freud noted that "Hans had to be told many things that he could not say himself" and that "he had to be presented with thoughts, which he had, so far, shown no signs of possessing".

**Anthropologic**

Contemporary criticism also questions the universality of the Freudian theory of personality (Id, Ego, Super-ego) discussed in the essay On Narcissism (1917), wherein he said that "it is impossible to suppose that a unity, comparable to the ego can exist in the individual from the very start". Contemporary cultural considerations have questioned the normative presumptions of the Freudian psychodynamic perspective that posits the son–father conflict of the Oedipal complex as universal and essential to human psychologic development.

The anthropologist Bronislaw Malinowski’s studies of the Trobriand islanders challenged the Freudian proposal that psychosexual development (e.g. the Oedipus complex) was universal. He reported that in the insular matriarchal society of the Trobriand, boys are disciplined by their maternal uncles, not their fathers; impartial, avuncular discipline. In Sex and Repression in Savage Society (1927), Malinowski reported that boys dreamed of feared uncles, not of beloved fathers, thus, Power — not sexual jealousy — is the source of Oedipal conflict in such non–Western societies. In Human Behavior in Global Perspective: an Introduction to Cross-Cultural Psychology (1999), Marshall H. Segall et al. propose that Freud based the theory of psychosexual development upon a misinterpretation. Furthermore, contemporary research confirms that although personality traits corresponding to the oral stage, the anal stage, the phallic stage, the latent stage, and the genital stage are observable, they remain undetermined as fixed stages of childhood, and as adult personality traits derived from childhood.

**Regression (psychology)**

Regression, according to psychoanalyst Sigmund Freud, is a defense mechanism leading to the temporary or long-term reversion of the ego to an earlier stage of development rather than handling unacceptable impulses in a more adult way. The defense mechanism of regression, in psychoanalytic theory, occurs when thoughts are pushed back out of our consciousness and into our unconscious.

Psychiatrist Joel Gold suggests that careful use of "ARISE" (Adaptive Regression in the service of the Ego) can sometimes yield creative benefits. To the extent that one is handling thoughts and impulses less like an adult, ARISE involves play, appreciation and primitive pleasures, and imagination.
Freud, regression, and neurosis

Freud saw development, fixation, and regression as centrally formative elements in the creation of a neurosis. Arguing that 'the libidinal function goes through a lengthy development', he assumed that 'a development of this kind involves two dangers - first, of inhibition, and secondly, of regression '. Inhibitions produced fixations; and the 'stronger the fixations on its path of development, the more readily will the function evade external difficulties by regressing to the fixations'.

Neurosis for Freud was thus the product of a flight from an unsatisfactory reality 'along the path of involution, of regression, of a return to earlier phases of sexual life, phases from which at one time satisfaction was not withheld. This regression appears to be a twofold one: a temporal one, in so far as the libido, the erotic needs, hark back to stages of development that are earlier in time, and a formal one, in that the original and primitive methods of psychic expression are employed in manifesting those needs'.

Regressive behavior can be complex and harmful, or simple and harmless. A person may revert to an old, usually immature behavior to ventilate feelings of frustration. Regression only becomes a problem when it is used frequently to avoid adult situations and causes problems in the individual's life. Behaviors associated with regression can vary greatly depending upon which stage the person is fixated at: An individual fixated at the oral stage might begin eating or smoking excessively, or might become very verbally aggressive. A fixation at the anal stage might result in excessive tidiness or messiness. Freud recognised that 'it is possible for several fixations to be left behind in the course of development, and each of these may allow an irruption of the libido that has been pushed off - beginning, perhaps, with the later acquired fixations, and going on, as the illness develops, to the original ones'.

In the service of the ego

'Kris supplements Freud's general formulations with a specific notion of "regression in the service of the ego"...the specific means whereby preconscious and unconscious material appear in the creator's consciousness'. Kris thus opened the way for ego psychology to take a more positive view of regression. Jung had earlier argued that 'the patient's regressive tendency...is not just a relapse into infantilism, but an attempt to get at something necessary...the universal feeling of childhood innocence, the sense of security, of protection, of reciprocated love, of trust'. Kris however was concerned rather to differentiate the way that 'Inspiration...in which the ego controls the primary process and puts it into its service - needs to be contrasted with the opposite...condition, in which the ego is overwhelmed by the primary process'.

Nevertheless his view of regression in the service of the ego could be readily extended into a quasi-Romantic image of the creative process, in which 'it is only in the fiery storm of a profound regression, in the course of which the personality undergoes both dissolution of structure and reorganization, that the genius becomes capable of wrestling himself from the
traditional pattern that he had been forced to integrate through the identifications necessitated and enforced by the oedipal constellation'.

From there it was perhaps only a small step to the Sixties valorisation of regression as a positive good in itself. 'In this particular type of journey, the direction we have to take is back and in….They will say we are regressed and withdrawn and out of contact with them. True enough, we have a long, long way to back to contact the reality'. Jungians had however already warned that 'romantic regression meant a surrender to the non-rational side which had to be paid for by a sacrifice of the rational and individual side', and Freud for his part had dourly noted that 'this extraordinary plasticity of mental developments is not unrestricted in direction; it may be described as a special capacity for involution - regression - since it may well happen that a later and higher level of development, once abandoned, cannot be reached again'.

**Later views**

'Anna Freud (1936) ranked regression first in her enumeration of the defense mechanisms', and similarly suggested that people act out behaviors from the stage of psychosexual development in which they are fixated. For example, an individual fixated at an earlier developmental stage might cry or sulk upon hearing unpleasant news.

Michael Balint 'distinguishes between two types of regression: a nasty "malignant" regression that the Oedipal level neurotic is prone to...and the "benign" regression of the basic-fault patient'. The problem then is what the analyst can do 'to ensure that his patient's regression should be therapeutic and any danger of a pathological regression avoided'.

Others have highlighted the technical dilemmas of dealing with regression from different if complementary angles. On the one hand, making premature 'assumptions about the patient's state of regression in the therapy...regarded as still at the breast', for example, might block awareness of more adult functioning on the patient's part: of 'the patient's view of the therapist'. The opposite mistake would be 'justifying a retreat from regressive material presented by a patient. When a patient begins to trust the analyst or therapist it will be just such disturbing aspects of the internal world that will be presented for understanding - not for a panic retreat by the therapist'.

Peter Blos suggested that 'revisiting of early psychic positions...helps the adolescent come out of the family envelope', and that 'Regression during adolescence thus advances the cause of development'. Stanley Olinick speaks of 'regression in the service of the other' on the part of the analyst 'during his or her clinical work. Such ego regression is a pre-condition for empathy'.

**In fiction**

- A clear example of regressive behavior in fiction can be seen in J.D. Salinger’s *The Catcher in the Rye*. Holden constantly contradicts the progression of time and the
aging process by reverting to childish ideas of escape, unrealistic expectations and frustration produced by his numerous shifts in behavior. His tendencies to reject responsibility and society as a whole because he 'doesn't fit in' also pushes him to prolonged use of reaction formation, unnecessary generalizations and compulsive lying.

- Gollum in The Lord of the Rings presents a picture of a still deeper regression. 'Gollum's extraordinary ideolict, with its infantile cringing and pleading...the playful, wheedling, sentimental argot of the nursery’, his solipsism, narcissism - 'Lord Smeagol? Gollum the Great? The Gollum! Eat fish every day...Most Precious Gollum!' and creeping on all fours all mark out his regression to early babyhood.

**Sublimation (psychology)**

In psychology, sublimation is a mature type of defence mechanism where socially unacceptable impulses or idealizations are consciously transformed into socially acceptable actions or behaviour, possibly converting the initial impulse in the long term. According to Wade and Tavris, sublimation is when displacement "serves a higher cultural or socially useful purpose, as in the creation of art or inventions." It was a term originally coined by Freud which was used to describe the spirit as a reflection of the libido, and has roots in his psychoanalytical theory.

**Psychoanalytic theory**

In Freud’s classic theory, erotic energy is allowed a limited amount of expression, due to constraints of human society.

Freud considered this defense mechanism the most productive compared to the others that he identified, such as repression, displacement, denial, reaction formation, intellectualisation and projection. Sublimation is the process of transforming libido into "socially useful" achievements, mainly art. Psychoanalysts often refer to sublimation as the only truly successful defense mechanism.

**Interpersonal psychoanalysis**

Harry Stack Sullivan, the pioneer of interpersonal psychoanalysis, defined sublimation as the unwitting substitution of a partial satisfaction with social approval for the pursuit of a direct satisfaction which would be contrary to one’s ideals or to the judgment of social censors and other important people who surround one. The substitution might not be quite what we want, but it is the only way that we can get part of our satisfaction and feel secure, too. Sullivan documented that all sublimatory things are more complicated than the direct satisfaction of the needs to which they apply. They entail no disturbance of consciousness, no stopping to think why they must be done or what the expense connected with direct satisfaction would be. In successful sublimation, Sullivan observed extraordinarily efficient handling of a conflict between the need for a satisfaction and the need for security without perturbation of awareness.
Sexual Sublimation

Sexual sublimation, also known as sexual transmutation, is the attempt, especially among some religious traditions, to transform sexual impulses or "sexual energy" into creative energy. In this context, sublimation is the transference of sexual energy, or libido, into a physical act or a different emotion in order to avoid confrontation with the sexual urge, which is itself contrary to the individual's belief or ascribed religious belief. It is based on the idea that "sexual energy" can be used to create a spiritual nature which in turn can create more sensual works, instead of one's sexuality being unleashed "raw." The classical example in Western religions is clerical celibacy.

As espoused in the Tanya, Hasidic Jewish mysticism views sublimation of the animal soul as an essential task in life, wherein the goal is to transform animalistic and earthy cravings for physical pleasure into holy desires to connect with God.

Different schools of thought describe general sexual urges as carriers of spiritual essence, and have the varied names of vital energy, vital winds (prana), spiritual energy, ojas, shakti, tummo, or kundalini. It is also believed that undergoing sexual sublimation can facilitate a mystical awakening in an individual.

Oedipus complex

In psychoanalytic theory, the term Oedipus complex denotes the emotions and ideas that the mind keeps in the unconscious, via dynamic repression, that concentrate upon a boy's desire to sexually possess his mother, and kill his father. In the course of his psychosexual development, the complex is the boy's phallic stage formation of a discrete sexual identity; a girl's analogous experience is the Electra complex. The Oedipus complex occurs in the third — phallic stage (ages 3-6) — of five psychosexual development stages: (i) the Oral, (ii) the Anal, (iii) the Phallic, (iv) the Latent, and (v) the Genital — in which the source libido pleasure is in a different erogenous zone of the infant's body.

In classical, Freudian psychoanalytic theory, the child's identification with the same-sex parent is the successful resolution of the Oedipus complex and of the Electra complex; his and her key psychological experience to developing a mature sexual role and identity. Sigmund Freud further proposed that girls and boys resolved their complexes differently — he via castration anxiety, she via penis envy; and that unsuccessful resolutions might lead to neurosis, paedophilia, and homosexuality. Hence, men and women who are fixated in the Oedipal and Electra stages of their psychosexual development might be considered "mother-fixated" and "father-fixated" as revealed when the mate (sexual partner) resembles the mother or the father.

Background
As a Freudian psychological metaphor describing son–father psychosexual competition for possession of mother, the Oedipus complex derives from the 5th-century BC Greek mythologic character Oedipus, who unwittingly kills his father, Laius, and marries his mother, Jocasta, (cf. Oedipus Rex, by Sophocles, ca. 429 BC). As a psychiatrist, Sigmund Freud (1856–1939) proposed that the Oedipus complex is a universal, psychological phenomenon innate (phylogenetic) to human beings, and the cause of much unconscious guilt; Freud thus described the man Oedipus:

“His destiny moves us only because it might have been ours — because the Oracle laid the same curse upon us before our birth as upon him. It is the fate of all of us, perhaps, to direct our first sexual impulse towards our mother and our first hatred and our first murderous wish against our father. Our dreams convince us that this is so.”

In classical psychoanalytic theory, the Oedipus complex occurs during the phallic stage of psychosexual development (age 3–6 years) when also occurs the formation of the libido and the ego; yet it might manifest itself at an earlier age.

Oedipal theoretic evolution

The six-stage chronology of Sigmund Freud’s theoretic evolution of the Oedipus complex is:

- Stage 1. 1897–1909. After his father’s death in 1896, and having seen the play Oedipus Rex, by Sophocles, Freud begins using the term “Oedipus”.
- Stage 2. 1909–1914. Proposes that Oedipal desire is the “nuclear complex” of all neuroses; first usage of “Oedipus complex” in 1910.
- Stage 4. 1919–1926. Complete Oedipus complex; identification and bisexuality are conceptually evident in later works.
- Stage 5. 1926–1931. Applies the Oedipal theory to religion and custom.
- Stage 6. 1931–1938. Investigates the “feminine Oedipus attitude” and “negative Oedipus complex”; later the “Electra complex”.

The Oedipus complex

In the phallic stage, a boy’s decisive psychosexual experience is the Oedipus complex — his son–father competition for possession of mother. It is in this third stage of psychosexual development (ages 3–6) that the child’s genitalia are his or her primary erogenous zone; thus, when children become aware of their bodies, the bodies of other children, and the bodies of their parents, they gratify physical curiosity by undressing and exploring themselves, each other, and their genitals, so learning the anatomic differences between “male” and “female” and the gender differences between “boy” and “girl”.

Psychosexual infantilism — Despite mother being the parent who primarily gratifies the child’s desires, the child begins forming a discrete sexual identity — “boy”, “girl” — that alters the dynamics of the parent and child relationship; the parents become objects of infantile libidinal energy. The boy directs his libido (sexual desire) upon his mother, and
directs jealousy and emotional rivalry against his father — because it is he who sleeps with mother. Moreover, to facilitate union with mother, the boy’s id wants to kill father (as did Oedipus), but the pragmatic ego, based upon the reality principle, knows that the father is the stronger of the two males competing to possess the one female. Nonetheless, the boy remains ambivalent about his father’s place in the family, which is manifested as fear of castration by the physically greater father; the fear is an irrational, subconscious manifestation of the infantile Id.

**Psycho-logic defense** — In both sexes, defense mechanisms provide transitory resolutions of the conflict between the drives of the Id and the drives of the Ego. The first defense mechanism is repression, the blocking of memories, emotional impulses, and ideas from the conscious mind; yet its action does not resolve the Id-Ego conflict. The second defense mechanism is identification, by which the child incorporates, to his or her ego, the personality characteristics of the same-sex parent; in so adapting, the boy diminishes his castration anxiety, because his likeness to father protects him from father’s wrath in their maternal rivalry; by so adapting, the girl facilitates identifying with mother, who understands that, in being females, neither of them possesses a penis, and thus are not antagonists.

**Dénouement** — Unresolved son–father competition for the psycho-sexual possession mother might result in a phallic stage fixation conducive to a boy becoming an aggressive, over-ambitious, vain man. Therefore, the satisfactory parental handling and resolution of the Oedipus complex are most important in developing the male infantile super-ego, because, by identifying with a parent, the boy internalizes Morality, thereby, he chooses to comply with societal rules, rather than reflexively complying in fear of punishment.

**Oedipal case study**

In Analysis of a Phobia in a Five-year-old Boy (1909), the case study of the equinophobic boy “Little Hans”, Freud showed that the relation between Hans’s fears — of horses and of his father — derived from external factors, the birth of a sister, and internal factors, the desire of the infantile id to replace father as companion to mother, and guilt for enjoying the masturbation normal to a boy of his age. Moreover, his admitting to wanting to procreate with mother was considered proof of the boy’s sexual attraction to the opposite-sex parent; he was a heterosexual male. Yet, the boy Hans was unable to relate fearing horses to fearing his father. As the treating psychoanalyst, Freud noted that “Hans had to be told many things that he could not say himself” and that “he had to be presented with thoughts, which he had, so far, shown no signs of possessing”.

**Feminine Oedipus attitude**

Initially, Dr. Freud equally applied the Oedipus complex to the psychosexual development of boys and girls, but later modified the female aspects of the theory as feminine Oedipus attitude and negative Oedipus complex; yet, it was his student–collaborator Carl Jung, who, in 1913, proposed the Electra complex to describe a girl’s daughter–mother competition for psychosexual possession of father.
In the phallic stage, a girl’s Electra complex is her decisive psychodynamic experience in forming a discrete sexual identity (ego). Whereas a boy develops castration anxiety, a girl develops penis envy rooted in anatomic fact: without a penis, she cannot sexually possess mother, as the infantile id demands. Resultantly, the girl redirects her desire for sexual union upon father, thus progressing to heterosexual femininity, which culminates in bearing a child, who replaces the absent penis. Furthermore, after the phallic stage, the girl’s psychosexual development includes transferring her primary erogenous zone from the infantile clitoris to the adult vagina.

Freud thus considered a girl’s negative Oedipus complex to be more emotionally intense than that of a boy, resulting, potentially, in a woman of submissive, insecure personality; thus might an unresolved Electra complex, daughter–mother competition for psychosexual possession of father, lead to a phallic-stage fixation conducive to a girl becoming a woman who continually strives to dominate men (viz. penis envy), either as an unusually seductive woman (high self-esteem) or as an unusually submissive woman (low self-esteem). Therefore, the satisfactory parental handling and resolution of the Electra complex are most important in developing the female infantile super-ego, because, by identifying with a parent, the girl internalizes Morality, thereby, she chooses to comply with societal rules, rather than reflexively complying in fear of punishment.

**Freudian theoretic revision**

When Sigmund Freud (1856–1939) proposed that the Oedipus complex was psychologically universal, he provoked the evolution of Freudian psychology and the psychoanalytic treatment method, by collaborator and competitor alike; some examples are:

**Carl Jung** — In countering Freud’s proposal that the psychosexual development of boys and girls is equal, that each initially experiences sexual desire (libido) for mother, and aggression towards father, student–collaborator Carl Jung counter-proposed that girls experienced desire for father and aggression towards mother via the Electra complex — derived from the 5th-century BC Greek mythologic character Electra, who plotted matricidal revenge with Orestes, her brother, against Clytemnestra, their mother, and Aegisthus, their stepfather, for their murder of Agamemnon, her father, (cf. Electra, by Sophocles). Moreover, because it is native to Freudian psychology, orthodox Jungian psychology uses the term “Oedipus complex” only to denote a boy’s psychosexual development.

**Otto Rank** — In classical Freudian psychology the super-ego, “the heir to the Oedipus complex”, is formed as the infant boy internalizes the familial rules of his father. In contrast, in the early 1920s, using the term pre-Oedipal, Otto Rank proposed that a boy’s powerful mother was the source of the super-ego, in the course of normal psychosexual development. Rank’s theoretic conflict with Freud excluded him from the Freudian inner circle; nonetheless, he later developed the psychodynamic Object relations theory in 1925.
Melanie Klein — Whereas Freud proposed that father (the paternal phallus) was central to infantile and adult psychosexual development, Melanie Klein concentrated upon the early maternal relationship, proposing that Oedipal manifestations are perceptible in the first year of life, the oral stage. Her proposal was part of the Controversial discussions (1942–44) at the British Psychoanalytical Association. The Kleinian psychologists proposed that “underlying the Oedipus complex, as Freud described it . . . there is an earlier layer of more primitive relationships with the Oedipal couple”. Moreover, Klein’s work lessened the central role of the Oedipus complex, with the concept of the depressive position.

Oedipus complex: Wilfred Bion (1916).

Wilfred Bion — “For the post–Kleinian Bion, the myth of Oedipus concerns investigatory curiosity — the quest for knowledge — rather than sexual difference; the other main character in the Oedipal drama becomes Tiresias (the false hypothesis erected against anxiety about a new theory)”. Resultantly, “Bion regarded the central crime of Oedipus as his insistence on knowing the truth at all costs”.

Oedipus complex: Jaques Lacan.

Jacques Lacan — From the postmodern perspective, Jacques Lacan argued against removing the Oedipus complex from the center of psychosexual developmental experience. He considered “the Oedipus complex — in so far as we continue to recognize it as covering the whole field of our experience with its signification . . . [that] superimposes the kingdom of culture” upon the person, marking his or her introduction to symbolic order. Thus “a child learns what power independent of itself is as it goes through the Oedipus complex . . . encountering the existence of a symbolic system independent of itself”. Moreover, Lacan’s proposal that “the ternary relation of the Oedipus complex” liberates the “prisoner of the dual relationship” of the son–mother relationship proved useful to later psychoanalysts; thus, for Bollas, the “achievement” of the Oedipus complex is that the “child comes to understand something about the oddity of possessing one’s own mind . . . discovers the multiplicity of points of view”. Likewise, for Ronald Britton, “if the link between the parents perceived in love and hate can be tolerated in the child’s mind . . . this provides us with a capacity for seeing us in interaction with others, and . . . for reflecting on ourselves, whilst being ourselves”. As such, in The Dove that Returns, the Dove that Vanishes (2000), Michael Parsons proposed that such a perspective permits viewing “the Oedipus complex as a lifelong developmental challenge . . . [with] new kinds of Oedipal configurations that belong to later life”.

In 1920, Sigmund Freud wrote that “with the progress of psychoanalytic studies the importance of the Oedipus complex has become, more and more, clearly evident; its recognition has become the shibboleth that distinguishes the adherents of psychoanalysis from its opponents”; thereby it remained a theoretic cornerstone of psychoanalysis until about 1930, when psychoanalysts began investigating the pre-Oedipal son–mother relationship within the theory of psychosexual development. Janet Malcolm reports that by the late 20th century, to the object relations psychology “avant-garde, the events of the Oedipal period are pallid and inconsequential, in comparison with the cliff-hanging psychodramas of infancy . . . For Kohut, as for Winnicott and Balint, the Oedipus complex is an irrelevance in the treatment of severe pathology”. Nonetheless, Ego psychology
continued to maintain that "the Oedipal period — roughly three-and-a-half to six years — is like Lorenz standing in front of the chick, it is the most formative, significant, moulding experience of human life . . . If you take a person’s adult life — his love, his work, his hobbies, his ambitions — they all point back to the Oedipus complex”.

**Criticism**

Contemporary psychoanalysts accept the universality of the Oedipus complex to different degrees; Hans Keller proposed it is so “at least in Western societies”; and others consider that ethnologists already have established its temporal and geographic universality. Nonetheless, few psychoanalysts disagree that the “child then entered an Oedipal phase . . . [which] involved an acute awareness of a complicated triangle involving mother, father, and child” and that “both positive and negative Oedipal themes are typically observable in development”. Despite evidence of parent–child conflict, the evolutionary psychologists Martin Daly and Margo Wilson note that it is not for sexual possession of the opposite sex-parent; thus, in Homicide (1988), they proposed that the Oedipus complex yields few testable predictions, because they found no evidence of the Oedipus complex in people.

Moreover, in No More Silly Love Songs: A Realist’s Guide to Romance (2010), Anouchka Grose said that “a large number of people, these days believe that Freud’s Oedipus complex is defunct . . . ‘disproven’, or simply found unnecessary, sometime in the last century”. Moreover, from the post-modern perspective, Grose said that “the Oedipus complex isn’t really like that. It’s more a way of explaining how human beings are socialised . . . learning to deal with disappointment”. The elementary understanding being that “You have to stop trying to be everything for your primary career, and get on with being something for the rest of the world”. Nonetheless, the open question remains whether or not such a post-Lacanian interpretation “stretches the Oedipus complex to a point where it almost doesn’t look like Freud’s any more”.

**Electra complex**

In Neo-Freudian psychology, the Electra complex, as proposed by Carl Gustav Jung, is a girl’s psychosexual competition with mother for possession of father. In the course of her psychosexual development, the complex is the girl’s phallic stage formation of a discrete sexual identity; a boy’s analogous experience is the Oedipus complex. The Electra complex occurs in the third — phallic stage (ages 3–6) — of five psychosexual development stages: (i) the Oral, (ii) the Anal, (iii) the Phallic, (iv) the Latent, and (v) the Genital — in which the source libido pleasure is in a different erogenous zone of the infant’s body.

In classical psychoanalytic theory, the child’s identification with the same-sex parent is the successful resolution of the Electra complex and of the Oedipus complex; his and her key psychological experience to developing a mature sexual role and identity. Sigmund Freud instead proposed that girls and boys resolved their complexes differently — she via penis envy, he via castration anxiety; and that unsuccessful resolutions might lead to neurosis, paedophilia, and homosexuality. Hence, women and men who are fixated in the Electra and
Oedipal stages of their psychosexual development might be considered “father-fixated” and “mother-fixated” as revealed when the mate (sexual partner) resembles the father or the mother.

Background

As a psychoanalytic metaphor for daughter–mother psychosexual conflict, the Electra complex derives from the 5th-century BC Greek mythologic character Electra, who plotted matricidal revenge with Orestes, her brother, against Clytemnestra, their mother, and Aegisthus, their stepfather, for their murder of Agamemnon, their father, (cf. Electra, by Sophocles). Sigmund Freud developed the female aspects of the sexual development theory — describing the psychodynamics of a girl’s sexual competition with mother for sexual possession of father — as the feminine Oedipus attitude and the negative Oedipus complex; yet it was his collaborator Carl Jung who coined the term Electra complex in 1913. Freud rejected Jung’s term as psychoanalytically inaccurate: “that what we have said about the Oedipus complex applies with complete strictness to the male child only, and that we are right in rejecting the term 'Electra complex', which seeks to emphasize the analogy between the attitude of the two sexes”.

In forming a discreted sexual identity (ego) a girl’s decisive psychosexual experience is the Electra complex — daughter–mother competition for possession of father. It is in the phallic stage (ages 3–6), when children become aware of their bodies, the bodies of other children, and the bodies of their parents that they gratify physical curiosity by undressing and exploring each other and their genitals — the erogenous center — of the phallic stage; thereby learning the physical differences between “male” and “female” and the gender differences between “boy” and “girl”. When a girl’s initial sexual attachment to mother ends upon discovering that she has no penis, she then transfers her libidinal desire (sexual attachment) to father and increases sexual competition with her mother.

The Electra complex

The psychodynamic character of the daughter–mother relationship in the Electra complex derives from penis envy, caused by mother, who also caused the girl's castration; however, upon re-aligning her sexual attraction to father (heterosexuality), the girl represses the hostile female competition, for fear of losing the love of her mother. This internalization of “Mother” develops the super-ego as the girl establishes a discrete sexual identity (ego). The girl’s penis envy is rooted in biologic fact, without a penis, she cannot sexually possess mother, as the infantile id demands. Resultantly, the girl redirects her desire for sexual union upon father, and thus progresses to heterosexual femininity, which culminates in bearing a child who replaces the absent penis. Moreover, after the phallic stage, the girl’s psychosexual development includes transferring her primary erogenous zone from the infantile clitoris to the adult vagina. Freud thus considered the feminine Oedipus attitude (“Electra complex”) to be more emotionally intense than the Oedipal conflict of a boy, resulting, potentially, in a woman of submissive, less confident personality.
In both sexes, defense mechanisms provide transitory resolutions of the conflicts between the drives of the Id and the drives of the ego. The first defense mechanism is repression, the blocking of memories, emotional impulses, and ideas from the conscious mind; yet it does not resolve the Id-Ego conflict. The second defense mechanism is identification, by which the child incorporates, to his or her ego, the personality characteristics of the same-sex parent; in so adapting, the girl facilitates identifying with mother, because she understands that, in being females, neither of them possesses a penis, thus are not antagonists. If sexual competition for the opposite-sex parent is unresolved, a phallic-stage fixation might arise, leading a girl to become a woman who continually strives to dominate men (viz. penis envy), either as an unusually seductive woman (high self-esteem) or as an unusually submissive woman (low self-esteem). In a boy, a phallic-stage fixation might lead him to become a vain, over-ambitious man. Therefore, the satisfactory parental handling and resolution of the Electra complex are most important in developing the infantile super-ego, because, by identifying with a parent, the girl internalizes Morality, thereby, she chooses to comply with societal rules, rather being reflexively compelled to comply, for fear of punishment.

**Case studies**

The study of patients at a New York state mental hospital, On the Prognostic Significance of the Mental Content in Manic-Depressive Psychosis (1921), reports that of 31 manic-depressive patients studied, 22 (70%) had been diagnosed as afflicted with an Electra complex; and that 12 of the 22 patients had regressed to early stages of psychosexual development.

**Electra in fiction**

Fiction affords people the opportunity to identify with the protagonists of fantastic stories depicting what might be if they could act upon their desires. Often, in aid to promoting social conformity, the myth, story, stage play, or film presents a story meant to frighten people from acting upon and pursuing their desires. In the course of infantile socialization, fairy tales fulfill said function; boys and girls identify with the hero and heroine in the course of their adventures. Often, the travails of hero and heroine are caused by an (evil) stepmother who is envious of him, her, or both, and will obstruct their fulfilling of desire. Girls, especially in the three-to-six year age range, can especially identify with a heroine for whom the love of a prince charming will sate her penis envy. Moreover, stories such as Cinderella have two maternal figures, the stepmother (society) and the fairy godmother; stepmother represents the girl’s feelings towards mother; the fairy godmother teaches the girl that her (step) mother loves her, thus, to have mother’s love, the girl must emulate the good Cinderella, not the wicked stepsisters.

**Electra in poetry**

The American poet Sylvia Plath (1932–1963) acknowledged that the poem Daddy (1962) is about a woman, afflicted with an unresolved Electra complex, who conflates her dead father and derelict husband in dealing with having been emotionally abandoned. Her
biographers noted a psychologic irony about the life of the poetess Plath: she knew her father for only eight years, before he died; she knew her husband for eight years, before she killed herself. Her husband was her substitute father, psychosexually apparent when she addresses him (the husband) as the “vampire father” haunting her since his death. In conflating father and husband as one man, Sylvia Plath indicates their emotional equality in her life; the unresolved Electra complex.

**Eros in psychology**

**Sigmund Freud**

In Freudian psychology, Eros, also called libido, libidinal energy or love, is the life instinct innate in all humans. It is the desire to create life and favours productivity and construction. In early psychonalytic writings, instincts from the Eros were opposed by forces from the ego. But in later psychoanalytic theory, Eros is opposed by the destructive death instinct of Thanatos (death instinct or death drive).

In his 1925 paper "The Resistances to Psycho-Analysis", Freud explains that the psychoanalytic concept of sexual energy is more in line with the Platonic view of Eros, as expressed in the Symposium, than with the common use of the word "sex" as related primarily to genital activity. He also mentions the philosopher Schopenhauer as an influence. He then goes on to confront his adversaries for ignoring such great precursors and for tainting his whole theory of Eros with a pansexual tendency. He finally writes that his theory naturally explains this collective misunderstanding as a predictable resistance to the acknowledgement of sexual activity in childhood.

The philosopher and sociologist Herbert Marcuse appropriated the Freudian concept of Eros for his highly influential 1955 work Eros and Civilization.

**Carl Jung**

In Carl Jung’s analytical psychology, the counterpart to Eros is logos, a Greek term for principle of rationality. Jung considers Logos to be a masculine principle, while Eros is a feminine principle:

Woman’s psychology is founded on the principle of Eros, the great binder and loosener, whereas from ancient times the ruling principle ascribed to man is Logos. The concept of Eros could be expressed in modern terms as psychic relatedness, and that of Logos as objective interest.

This gendering of Eros and Logos is a consequence of Jung’s theory of the anima/animus syzygy of the human psyche. According to Jung, men and women have opposite-gendered counterparts within their unconscious: for example men have an unconscious feminine principle, the "anima", and this is a caricature of the feminine Eros. An aspect of the work of individuation for men, then, is to confront the anima and learn to accept it, by accepting...
Eros. This is necessary in order to see beyond the projections that initially blind the ego. To "withdraw the projections" one must learn about and assimilate the unconscious forces into the conscious mind.

In essence, Jung’s concept of Eros is not dissimilar to the Platonic one. Eros is ultimately the desire for wholeness, and although it may initially take the form of passionate love, it is more truly a desire for "psychic relatedness", a desire for interconnection and interaction with other sentient beings. However, Jung was inconsistent, and he did sometimes use the word "Eros" as a shorthand to designate sexuality.

**Thanatos In psychology and medicine**

According to Sigmund Freud, humans have a life instinct—which he named "Eros"—and a death drive, which is commonly called (though not by Freud himself) "Thanatos". This postulated death drive allegedly compels humans to engage in risky and self-destructive acts that could lead to their own death. Behaviors such as thrill seeking and aggression are viewed as actions which stem from this Thanatos instinct. However, scientific research has found little evidence that most people have a specific drive toward self-destruction. The behaviors Freud studied can be explained by simpler, known processes, such as salience biases (e.g., a person abuses drugs because the promise of immediate pleasure is more compelling than the intellectual knowledge of harm sometime in the future) and risk calculations (e.g., a person drives recklessly or plays dangerous sports because the increases in status and reproductive success outweigh the risk of injury or death).

Thanatophobia is the fear of things associated with or reminiscent of death and mortality, such as corpses or graveyards. It is also known as necrophobia, although this term typically refers to a specific fear of dead bodies rather than a fear of death in general.

Thanatology is the academic and scientific study of death among human beings. It investigates the circumstances surrounding a person's death, the grief experienced by the deceased's loved ones, and larger social attitudes towards death such as ritual and memorialization. It is primarily an interdisciplinary study, frequently undertaken by professionals in nursing, psychology, sociology, psychiatry, social work and veterinary science. It also describes bodily changes that accompany death and the after-death period.

Thanatophoric dysplasia, so named because of its lethality at birth, is the most common lethal congenital skeletal dysplasia with an estimated prevalence of one in 6,400 to one in 16,700 births. Its name Thanatophoros, means "death-bearing" in Greek.

Euthanasia, "good death" in Greek, is the act or practice of ending the life of an individual who would otherwise experience severe, incurable suffering or disability. It typically involves lethal injection or the suspension of extraordinary medical treatment. Doctor Jack Kevorkian named his euthanasia device the Thanatron.
Death drive

In classical Freudian psychoanalytic theory, the death drive ("Todestrieb") is the drive towards death, self-destruction and the return to the inorganic: 'the hypothesis of a death instinct, the task of which is to lead organic life back into the inanimate state'. It was originally proposed by Sigmund Freud in 1920 in Beyond the Pleasure Principle, where in his first published reference to the term he wrote of the 'opposition between the ego or death instincts and the sexual or life instincts'. The death drive opposes Eros, the tendency toward survival, propagation, sex, and other creative, life-producing drives. The death drive is sometimes referred to as "Thanatos" in post-Freudian thought, complementing "Eros", although this term was not used in Freud's own work, being rather introduced by one of Freud's followers, Wilhelm Stekel.

The Standard Edition of Freud's works in English confuses two terms that are different in German, Instinkt ("instinct") and Trieb ("drive"), often translating both as instinct. 'This incorrect equating of instinct and Trieb has created serious misunderstandings'. Freud actually refers to the "death instinct" as a drive, a force that is not essential to the life of an organism (unlike an instinct) and tends to denature it or make it behave in ways that are sometimes counter-intuitive. The term is almost universally known in scholarly literature on Freud as the "death drive", and Lacanian psychoanalysts often shorten it to simply "drive" (although Freud posited the existence of other drives as well).

The making of the theory: Beyond the Pleasure Principle

It was a basic premise of Freud's that 'the course taken by mental events is automatically regulated by the pleasure principle...[associated] with an avoidance of unpleasure or a production of pleasure'. Three main types of conflictual evidence, difficult to explain satisfactorily in such terms, led Freud late in his career to look for another principle in mental life beyond the pleasure principle - a search which would ultimately lead him to the concept of the death drive.

The first problem Freud encountered was the phenomenon of repetition in (war) trauma. When Freud worked with people with trauma (particularly the trauma experienced by soldiers returning from World War I), he observed that subjects often tended to repeat or re-enact these traumatic experiences: 'dreams occurring in traumatic have the characteristic of repeatedly bringing the patient back into the situation of his accident', contrary to the expectations of the pleasure principle.

A second problematic area was found by Freud in children's play (such as the celebrated Fort/Da [Forth/here] game played by Freud's grandson, who would stage and re-stage the disappearance of his mother and even himself). 'How then does his repetition of this distressing experience as a game fit in with the pleasure principle?'.

The third problem came from clinical practice. Freud found his patients, dealing with painful experiences that had been repressed, regularly 'obliged to repeat the repressed
material as a contemporary experience instead of...remembering it as something belonging to the past'. Combined with what he called 'the compulsion of destiny...come across [in] people all of whose human relationships have the same outcome, such evidence led Freud 'to justify the hypothesis of a compulsion to repeat - something that would seem more primitive, more elementary, more instinctual than the pleasure principle which it over-rides'.

He then set out to find an explanation of such a compulsion; and in Freud's own words, 'What follows is speculation, often far-fetched speculation, which the reader will consider or dismiss according to his individual predilection'. Seeking a new instinctual paradigm for such problematic repetition, he found it ultimately in 'an urge in organic life to restore an earlier state of things' - the inorganic state from which life originally emerged. From the conservative, restorative character of instinctual life, Freud derived his death drive, with its 'pressure towards death', and the resulting 'separation of the death instincts from the life instincts' seen in Eros. The death drive then manifested itself in the individual creature as a force 'whose function is to assure that the organism shall follow its own path to death'.

Seeking further potential clinical support for the existence of such a self-destructive force, Freud found it through a reconsideration of his views of masochism - previously 'regarded as sadism that has been turned round upon the subject's own ego' - so as to allow that 'there might be such a thing as primary masochism - a possibility which I had contested' before. Even with such support, however, he remained very tentative to the book's close about the provisional nature of his theoretical construct: what he called 'the whole of our artificial structure of hypotheses.

Nevertheless, in later years Freud would build extensively upon the tentative foundations he had set out in Beyond the Pleasure Principle. In The Ego and the Id (1923) he would develop his argument to state that 'the death instinct would thus seem to express itself - though probably only in part - as an instinct of destruction directed against the external world'. The following year he would spell out more clearly that the 'libido has the task of making the destroying instinct innocuous, and it fulfils the task by diverting that instinct to a great extent outwards...The instinct is then called the destructive instinct, the instinct for mastery, or the will to power', a perhaps much more recognisable set of manifestations.

At the close of the decade, in Civilization and Its Discontents (1930), Freud would acknowledge that 'To begin with it was only tentatively that I put forward the views I have developed here, but in the course of time they have gained such a hold upon me that I can no longer think in any other way'.

Philosophy

From a Philosophical perspective, the Death Drive may be viewed in relation to the work of the German Philosopher Arthur Schopenhauer. His philosophy, expounded in The World as Will and Representation (1818) postulates that all exists by a metaphysical 'Will' (more clearly, a Will to live), and that pleasure affirms this will. Schopenhauer's pessimism led him to believe that the affirmation of the Will was a negative and immoral thing, due to his
belief of life producing more suffering than happiness. The Death Drive would seem to manifest as a natural and psychological negation of the Will.

Freud himself was of course well aware of such possible linkages. In a letter of 1919, he wrote that regarding 'the theme of death, [that I] have stumbled onto an odd idea via the drives and must now read all sorts of things that belong to it, for instance Schopenhauer'. Indeed, Ernest Jones (who like many analysts was not convinced of the need for the death drive, over and above an instinct of aggression) considered that 'Freud seemed to have landed in the position of Schopenhauer, who taught that “death is the goal of life”'.

However, as Freud put it to the imagined auditors of his New Introductory Lectures (1932), 'You may perhaps shrug your shoulders and say:"That isn't natural science, it's Schopenhauer's philosophy!" But, Ladies and Gentlemen, why should not a bold thinker have guessed something that is afterwards confirmed by sober and painstaking detailed research?'. He then went on to add that 'what we are saying is not even genuine Schopenhauer....we are not overlooking the fact that there is life as well as death. We recognise two basic instincts and give each of them its own aim'.

**Cultural application: Civilization and its Discontents**

Freud applied his new theoretical construct in Civilization and Its Discontents (1930) to the difficulties inherent in Western civilization - indeed, in civilization and in social life as a whole. In particular, given that 'a portion of the [death] instinct is diverted towards the external world and comes to light as an instinct of aggressiveness', he saw 'the inclination to aggression...[as] the greatest impediment to civilization'. The need to overcome such aggression entailed the formation of the [cultural] superego: 'We have been guilty of the heresy of attributing the origin of conscience to this diversion inwards of aggressiveness'. The presence thereafter in the individual of the superego and a related sense of guilt - 'Civilization, therefore, obtains mastery over the individual’s dangerous desire for aggression by...setting up an agency within him to watch over it' - leaves an abiding sense of uneasiness inherent in civilized life, thereby providing a structural explanation for 'the suffering of civilized man'.

Freud made a further connection between group life and innate aggression, where the former comes together more closely by directing aggression to other groups, an idea later picked up by group analysts like Wilfred Bion.

**The continuing development of Freud’s views**

In the closing decade of Freud's life, it has been suggested, his view of the death instinct changed somewhat, with 'the stress much more upon the death instinct's manifestations outwards'. Given 'the ubiquity of non-erotic aggressivity and destructiveness', he wrote in 1930, 'I adopt the standpoint, therefore, that the inclination to aggression is an original, self-subsisting instinctual disposition in man'.
In 1933 he conceded of his original formulation of the death instinct 'the improbability of our speculations. A queer instinct, indeed, directed to the destruction of its own organic home!'. He wrote moreover that 'Our hypothesis is that there are two essentially different classes of instincts: the sexual instincts, understood in the widest sense - Eros, if you prefer that name - and the aggressive instincts, whose aim is destruction'. In 1937, he went so far as to suggest privately that 'We should have a neat schematic picture if we supposed that originally, at the beginning of life, all libido was directed to the inside and all aggressiveness to the outside'. In his last writings, it was the contrast of 'two basic instincts, Eros and the destructive instinct...our two primal instincts, Eros and destructiveness, on which he laid stress. Nevertheless, his belief in 'the death instinct...[as] a return to an earlier state...into an inorganic state continued to the end.

**Analytic reception**

As Freud wryly commented in 1930, 'The assumption of the existence of an instinct of death or destruction has met with resistance even in analytic circles'. Indeed, Ernest Jones would comment of Beyond the Pleasure Principle that the book not only 'displayed a boldness of speculation that was unique in all his writings' but was 'further noteworthy in being the only one of Freud's which has received little acceptance on the part of his followers'.

Otto Fenichel in his compendious survey of the first Freudian half-century concluded that 'the facts on which Freud based his concept of a death instinct in no way necessitate the assumption...of a genuine self-destructive instinct'. Heinz Hartmann set the tone for ego psychology when he 'chose to...do without "Freud's other, mainly biologically oriented set of hypotheses of the 'life' and 'death instincts'"'. In the object relations theory, among the Independent group 'the most common repudiation was the loathsome notion of the death instinct'. Indeed, 'for most analysts Freud's idea of a primitive urge towards death, of a primary masochism, was...bedevilled by problems'.

Nevertheless the concept has been defended, extended, and carried forward by some analysts, generally those tangential to the psychoanalytic mainstream; while among the more orthodox, arguably of 'those who, in contrast to most other analysts, take Freud's doctrine of the death drive seriously, K. R. Eissler has been the most persuasive - or least unpersuasive'.

Melanie Klein and her immediate followers considered that 'the infant is exposed from birth to the anxiety stirred up by the inborn polarity of instincts - the immediate conflict between the life instinct and the death instinct'; and Kleinians indeed built much of their theory of early childhood around the outward deflection of the latter. 'This deflection of the death instinct, described by Freud, in Melanie Klein's view consists partly of a projection, partly of the conversion of the death instinct into aggression'.

Lacan for his part castigated the 'refusal to accept this culminating point of Freud's doctrine...by those who conduct their analysis on the basis of a conception of the ego...that death instinct whose enigma Freud propounded for us at the height of his experience'.
Characteristically, he stressed the linguistic aspects of the death drive: 'the symbol is substituted for death in order to take possession of the first swelling of life....There is therefore no further need to have recourse to the outworn notion of primordial masochism in order to understand the reason for the repetitive games in...his Fort! and in his Da!.

Eric Berne too would proudly proclaim that he, 'besides having repeated and confirmed the conventional observations of Freud, also believes right down the line with him concerning the death instinct, and the pervasiveness of the repetition compulsion'.

For the twenty-first century, 'the death drive today...remains a highly controversial theory for many psychoanalysts...[almost] as many opinions as there are psychoanalysts'.

Ego psychology

Ego psychology is a school of psychoanalysis rooted in Sigmund Freud's structural id-ego-superego model of the mind.

An individual interacts with the external world as well as responds to internal forces. Many psychoanalysts use a theoretical construct called the ego to explain how that is done through various ego functions. Proponents of ego psychology focus on the ego's normal and pathological development, its management of libidinal and aggressive impulses, and its adaptation to reality.

History

Sigmund Freud initially considered the ego to be a sense organ for perception of both external and internal stimuli. He thought of the ego as synonymous with consciousness and contrasted it with the repressed unconscious. By 1911, he referenced ego instincts for the first time in Formulations on the Two Principles of Mental Functioning and contrasted them with sexual instincts: ego instincts responded to the reality principle while sexual instincts obeyed the pleasure principle. He also introduced attention and memory as ego functions.

Freud began to notice that not all unconscious phenomena could be attributed to the id; it appeared as if the ego had unconscious aspects as well. This posed a significant problem for his topographic theory, which he resolved with the publication of his essay The Ego and the Id (1923). In what came to be called the structural theory, the ego was now a formal component of a three-way system that also included the id and superego. The ego was still organized around conscious perceptual capacities, yet it now had unconscious features responsible for repression and other defensive operations. Freud's ego at this stage was relatively passive and weak; he described it as the helpless rider on the id's horse, more or less obliged to go where the id wished to go (Meissner, 159).
Not long after The Ego and the Id, Freud (1926) published Inhibitions, Symptoms, and Anxiety. In this essay, Freud revised his theory of anxiety as well as delineating a more robust ego. Instead of being passive and reactive to the id, the ego was now a formidable counterweight to it, responsible for regulating id impulses, as well as integrating an individual’s functioning into a coherent whole. The modifications made by Freud in Inhibitions, Symptoms, and Anxiety formed the basis of a psychoanalytic psychology interest in the nature and functions of the ego.

Following Freud, the psychoanalyst most responsible for the development of ego psychology was Heinz Hartmann (1958). Through his assiduous study of ego functions and how an individual adapts to his or her environment, Hartmann created both a general psychology and a clinical instrument with which an analyst could evaluate an individual’s functioning and formulate appropriate therapeutic interventions. Mitchell and Black (1995) write “Hartmann powerfully affected the course of psychoanalysis, opening up a crucial investigation of the key processes and vicissitudes of normal development. Hartmann’s contributions broadened the scope of psychoanalytic concerns, from psychopathology to general human development, from an isolated, self-contained treatment method to a sweeping intellectual discipline among other disciplines (p. 35).”

Hartmann (1958) believed the ego included innate capacities for such things as perception, attention, memory, concentration, motor coordination, and language. Under normal conditions, what Hartmann called an average expectable environment, these capacities developed into ego functions and had autonomy from the libidinal and aggressive drives; that is, they were not products of frustration and conflict, as Freud (1911) believed. Hartmann recognized, however, that conflicts were part of the human condition and in the process of ego development certain functions often became conflicted by aggressive and libidinal impulses. According to Hartmann, the task of the psychoanalyst was to neutralize conflicted impulses and expand the conflict-free spheres of ego functions. By doing so, Hartmann believed psychoanalysis facilitated an individual’s adaptation to his or her environment.

Subsequent psychoanalysts interested in ego psychology emphasized the role of defenses, early-childhood experiences, and the importance of socio-cultural influences. First, Anna Freud (1966; first edition 1936)) focused her attention on the ego’s unconscious, defensive operations and introduced many important theoretical and clinical considerations. She believed the ego was predisposed to supervise, regulate, and oppose the id through defenses and that this activity could be observed by the psychoanalyst in the manifest presentation of the patient’s associations. The analyst needed to be attuned to the moment-by-moment process of what the patient talked about in order to identify, label, and explore defenses as they appeared. For Anna Freud, interpreting repressed content was less important than understanding the ego’s methods by which it kept things out of consciousness.

Next, René Spitz (1965), Margaret Mahler (1968), and Edith Jacobson (1964) studied infant behavior and their observations were integrated into ego psychology. Their research described and explained early attachment issues, successful and faulty ego development,
and psychological development through interpersonal interactions. In particular, Spitz identified the importance of mother-infant nonverbal emotional reciprocity; Mahler refined the traditional psychosexual developmental phases by adding the separation-individuation process; and Jacobson emphasized how libidinal and aggressive impulses unfolded within the context of early relationships and environmental factors.

Finally, Erik Erikson provided a bold reformulation of Freud’s biologic, epigenetic psychosexual theory through his explorations of socio-cultural influences on ego development. For Erikson, an individual was pushed by his or her own biological urges and pulled by socio-cultural forces.

In the United States, ego psychology was the predominant psychoanalytic approach due mostly to the influx of European psychoanalysts, including all the prominent ego psychologists, during and after World War II. Ego psychology, however, gradually became conflated with the hegemonic influence of the American Psychoanalytic Association and the theory came to be viewed as conservative, oppressive, and focused too narrowly on oedipal conflicts. It was challenged by W.R.D. Fairbairn’s object relations theory, Melanie Klein’s theory, and then by Heinz Kohut’s self psychology. (Ego psychology should not be confused with self psychology, as the two are distinctly different models of the mind with differing clinical methods.)

Charles Brenner (1982) attempted to revive ego psychology with a concise and incisive articulation of the fundamental focus of psychoanalysis: intrapsychic conflict and the resulting compromise formations. Over time, Brenner (2002) tried to develop a more clinically-based theory, what came to be called “modern conflict theory.” He distanced himself from the formal components of the structural theory and its metapsychological assumptions, and focused entirely on compromise formations. It is, in essence, ego psychology by another name.

Other ego psychologists, such as Paul Gray (2005) and Fred Busch, have argued for an increasingly nuanced and sophisticated concept of the ego. In particular, Gray argued that there has been a “developmental lag” in psychoanalysis; that is, when Freud shifted from the topographic to the structural model, a corresponding shift in technique, made necessary by the new model, was slow to develop.

**Ego functions**

**Reality Testing:** The ego’s capacity to distinguish what is occurring in one’s own mind from what is occurring in the external world. It is perhaps the single most important ego function because it is necessary for negotiating with the outside world. One must be able to perceive and understand stimuli accurately. Reality testing is often subject to temporary, mild distortion or deterioration under stressful conditions. Such impairment can result in temporary delusions and hallucination and is generally selective, clustering along specific, psychodynamic lines. Chronic deficiencies suggest either psychotic or organic interference.
**Impulse Control:** The ability to manage aggressive and/or libidinal wishes without immediate discharge through behavior or symptoms. Problems with impulse control are common; for example: road rage; sexual promiscuity; excessive drug and alcohol use; and binge eating.

**Affect Regulation:** The ability to modulate feelings without being overwhelmed.

**Judgment:** The capacity to act responsibly. This process includes identifying possible courses of action, anticipating and evaluating likely consequences, and making decisions as to what is appropriate in certain circumstances.

**Object Relations:** The capacity for mutually satisfying relationship. The individual can perceive himself and others as whole objects with three dimensional qualities.

**Thought Processes:** The ability to have logical, coherent, and abstract thoughts. In stressful situations, thought processes can become disorganized. The presence of chronic or severe problems in conceptual thinking is frequently associated with schizophrenia and manic episodes.

**Defensive Functioning:** A defense is an unconscious attempt to protect the individual from some powerful identity-threatening feeling. Initial defenses develop in infancy and involve the boundary between the self and the outer world; they are considered primitive defenses and include projection, denial, and splitting. As the child grows up, more sophisticated defenses that deal with internal boundaries such as those between ego and super ego or the id develop; these defenses include repression, regression, displacement, and reaction formation. All adults have, and use, primitive defenses, but most people also have more mature ways of coping with reality and anxiety.

**Synthesis:** The synthetic function is the ego’s capacity to organize and unify other functions within the personality. It enables the individual to think, feel, and act in a coherent manner. It includes the capacity to integrate potentially contradictory experiences, ideas, and feelings; for example, a child loves his or her mother yet also has angry feelings toward her at times. The ability to synthesize these feelings is a pivotal developmental achievement.

**Conflict, defense, and resistance analysis**

According to Freud’s structural theory, an individual’s libidinal and aggressive impulses are continuously in conflict with his or her own conscience as well as with the limits imposed by reality. In certain circumstances, these conflicts may lead to neurotic symptoms. Thus, the goal of psychoanalytic treatment is to establish a balance between bodily needs, psychological wants, one’s own conscience, and social constraints. Ego psychologists argue that the conflict is best addressed by the psychological agency that has the closest relationship to consciousness, unconsciousness, and reality: the ego.
The clinical technique most commonly associated with ego psychology is defense analysis. Through clarifying, confronting, and interpreting the typical defense mechanisms a patient uses, ego psychologists hope to help the patient gain control over these mechanisms.

**Criticisms of ego psychology**

Many authors have criticized Hartmann’s conception of a conflict-free sphere of ego functioning as both incoherent and inconsistent with Freud’s vision of psychoanalysis as a science of mental conflict. Freud believed that the ego itself takes shape as a result of the conflict between the id and the external world. The ego, therefore, is inherently a conflicting formation in the mind. To state, as Hartmann did, that the ego contains a conflict-free sphere may not be consistent with key propositions of Freud’s structural theory.

Some have also accused Hartmann of proposing a conformist psychology in which the ego is considered most healthy when it adjusts to the status quo. Hartmann claimed, however, that his aim was to understand the mutual regulation of the ego and environment rather than to promote adjustment of the ego to the environment. Furthermore, an individual with a less-conflicted ego would be better able to actively respond and shape, rather than passively react to, his or her environment.

Also, Jacques Lacan, a prominent French psychoanalyst, had a certain disdain for ego-psychology. He took issue with the movement insofar as his form of psychoanalysis focuses on the unconscious, rather than the ego. It also splits the ego and theorizes how one never has a true relation to their ego because it is an illusionary relationship to an ideal image, and is a product of the unconscious itself.

**Object relations theory**

Object relations theory is a psychodynamic theory within psychoanalytic psychology. The theory describes the process of developing a mind as one grows in relation to others in the environment. The "objects" of the theory are both real others in one's world, and one's internalized image of others. Object relationships are initially formed during early interactions with primary care givers. These early patterns can be altered with experience, but often continue to exert a strong influence throughout life.

The term "object relations theory" was formally coined by Ronald Fairbairn in 1952, but the line of thought being referred to was active in shaping psychoanalysis from 1917 onwards. Object relations theory was actively pioneered throughout the 1940s and 50s by British psychologists Ronald Fairbairn, Melanie Klein, Donald Winnicott, Harry Guntrip, Scott Stuart, and others.

Objects are initially comprehended in the infant mind by their functions and are termed "part objects." The breast that feeds the hungry infant is the "good breast." The hungry infant that finds no breast is in relation to the "bad breast."
Internal objects are formed by the patterns emerging in one's repeated subjective experience of the care taking environment. These internalized images may or may not be accurate representations of the actual, external others. With a "good enough" "facilitating environment" part object functions eventually transform into a comprehension of whole objects. This corresponds with the ability to tolerate ambiguity, to see that both the "good" and the "bad" breast are a part of the same "mummy."

**History**

While Fairbairn coined the term "object relations," Melanie Klein's work tends to be most commonly identified with the terms "object relations theory" and "British object relations," at least in contemporary North America, though the influence of 'what is known as the British independent perspective, which argued that the primary motivation of the child is object seeking rather than drive gratification' is becoming increasingly recognized.

Freud originally identified people in a subject's environment with the term "object" to identify people as the object of drives. Fairbairn took a radical departure from Freud by positing that humans were not seeking satisfaction of the drive, but actually seek the satisfaction that comes in relation to real others. Klein and Fairbairn were working along similar lines, but unlike Fairbairn, Klein always held that she was not departing from Freudian theory, but simply elaborating early developmental phenomena consistent with Freudian theory.

Within the London psychoanalytic community, a conflict of loyalties took place between Klein and object relations theory (sometimes referred to as "id psychology") , and Anna Freud and ego psychology. In America, Anna Freud dominated American psychoanalysis in 1940s, 1950s, and 1960s. American ego psychology was furthered in the works of Hartmann, Kris, Loewenstein, Rapaport, Erikson, Jacobson, and Mahler. In London, those who refused to choose sides were termed the "middle school," whose members included Michael Balint and Winnicott. The strong animosity in England between the school of Anna Freud and that of Melanie Klein was transplanted to the US, where the Anna Freud group dominated totally until the 1970s. Until the 1970s, few American psychoanalysts were influenced by the thinking of Melanie Klein.

Fairbairn revised much of Freud's model of the mind. He identified how people who were abused as children internalize that experience. Fairbairn's "moral defense" is the tendency seen in survivors of abuse to take all the bad upon themselves, each believing he is morally bad so his caretaker can be regarded as good. This is a use of splitting as a defense to maintain an attachment relationship in an unsafe world.

**Kleinian object relations theory**

**Unconscious Phantasy** (deliberately spelled with 'ph' to distinguish it from the word 'fantasy')
Klein termed the psychological aspect of instinct, unconscious phantasy. Phantasy is a given of psychic life which moves outward towards the world. These image-potentials are given a priori with the drives and eventually allow the development of more complex states of mental life. Unconscious phantasy in the infant's emerging mental life is modified by the environment as the infant has contact with reality.

From the moment the infant starts interacting with the outer world, he is engaged in testing his phantasies in a reality setting. I want to suggest that the origin of thought lies in this process of testing phantasy against reality; that is, that thought is not only contrasted with phantasy, but based on it and derived from it.45

The role of unconscious phantasy is essential in the development of a capacity for thinking. In Bion’s terms, the phantasy image is a preconception that will not be a thought until experience combines with a realization in the world of experience. The preconception and realization combine to take form as a concept that can be thought. The classic example of this is the infant’s observed rooting for the nipple in the first hours of life. The instinctual rooting is the preconception. The provision of the nipple provides the realization in the world of experience, and through time, with repeated experience, the preconception and realization combined to create the concept. Mental capacity builds upon previous experience as the environment and infant interact.

The first bodily experiences begin to build up the first memories, and external realities are progressively woven into the texture of phantasy. Before long, the child’s phantasies are able to draw upon plastic images as well as sensations—visual, auditory, kinesthetic, touch, taste, smell images, etc. And these plastic images and dramatic representations of phantasy are progressively elaborated along with articulated perceptions of the external world.

With adequate care, the infant is able to tolerate increasing awareness of experience which is underlain by unconscious phantasy and leads to attainment of consecutive developmental achievements, "the positions" in Kleinian theory.

**Projective identification**

As a specific term, projective identification is introduced by Klein in “Notes on some schizoid mechanisms.”

[Projection] helps the ego to overcome anxiety by ridding it of danger and badness. Introjection of the good object is also used by the ego as a defense against anxiety. . . . The processes of splitting off parts of the self and projecting them into objects are thus of vital importance for normal development as well as for abnormal object-relation. The effect of introjection on object relations is equally important. The introjection of the good object, first of all the mother’s breast, is a precondition for normal development . . . It comes to form a focal point in the ego and makes for cohesiveness of the ego. . . . I suggest for these processes the term ‘projective identification’:6-9
Klein imagined this function as a defense which contributes to the normal development of the infant, including ego structure and the development of object relations. The introjection of the good breast provides a location where one can hide from persecution, an early step in developing a capacity to self-soothe.

Ogden identifies four functions that projective identification may serve. As in the traditional Kleinian model, it serves as a defense. Projective identification serves as a mode of communication. It is a form of object relations, and “a pathway for psychological change.” As a form of object relationship, projective identification is a way of relating with others who are not seen as entirely separate from the individual. Instead, this relating takes place “between the stage of the subjective object and that of true object relatedness”.

The positions

The positions of Kleinian theory, underlain by unconscious phantasy, are stages in the normal development of ego and object relationships, each with its own characteristic defenses and organizational structure. The paranoid-schizoid and depressive positions occur in the pre-oedipal, oral phase of development.

In contrast to Fairbairn and later Guntrip, Klein believed that both good and bad objects are introjected by the infant, the internalization of good object being essential to the development of healthy ego function.:4 Klein conceptualized the depressive position as “the most mature form of psychological organization”, which continues to develop throughout the life span.:11

The depressive position occurs during the second quarter of the first year.:14 Prior to that the infant is in the paranoid-schizoid position, which is characterized by persecutory anxieties and the mechanisms of splitting, projection, introjection, and omnipotence—which includes idealizing and denial—to defend against these anxieties.:7 Depressive and paranoid-schizoid modes of experience continue to intermingle throughout the first few years of childhood.

Paranoid-schizoid position

The paranoid-schizoid position is characterized by part object relationships. Part objects are a function of splitting, which takes place in phantasy. At this developmental stage, experience can only be perceived as all good or all bad. As part objects, it is the function that is identified by the experiencing self, rather than whole and autonomous others. The hungry infant desires the good breast who feeds it. Should that breast appear, it is the good breast. If the breast does not appear, the hungry and now frustrated infant in its distress, has destructive phantasies dominated by oral aggression towards the bad, hallucinated breast.

Klein notes that in splitting the object, the ego is also split.:6 The infant who phantasies destruction of the bad breast is not the same infant that takes in the good breast, at least
not until obtaining the depressive position, at which point good and bad can be tolerated simultaneously in the same person and the capacity for remorse and reparation ensue.

The anxieties of the paranoid schizoid position are of a persecutory nature, fear of the ego’s annihilation.:33 Splitting allows good to stay separate from bad. Projection is an attempt to eject the bad in order to control through omnipotent mastery. Splitting is never fully effective, according to Klein, as the ego tends towards integration.:34

**Depressive position**

Klein saw the depressive position as an important developmental milestone that continues to mature throughout the life span. The splitting and part object relations that characterize the earlier phase are succeeded by the capacity to perceive that the other who frustrates is also the one who gratifies. Schizoid defenses are still in evidence, but feelings of guilt, grief, and the desire for reparation gain dominance in the developing mind.

In the depressive position, the infant is able to experience others as whole, which radically alters object relationships from the earlier phase.:3 "Before the depressive position, a good object is not in any way the same thing as a bad object. It is only in the depressive position that polar qualities can be seen as different aspects of the same object." :37 Increasing nearness of good and bad brings a corresponding integration of ego.

In a development which Grotstein terms the "primal split".:39 the infant becomes aware of separateness from the mother. This awareness allows guilt to arise in response to the infant’s previous aggressive phantasies when bad was split from good. The mother’s temporary absences allow for continuous restoration of her "as an image of representation" in the infant mind.:39 Symbolic thought may now arise, and can only emerge once access to the depressive position has been obtained. With the awareness of the primal split, a space is created in which the symbol, the symbolized, and the experiencing subject coexist. History, subjectivity, interiority, and empathy all become possible.:14

The anxieties characteristic of the depressive position shift from a fear of being destroyed to a fear of destroying others. In fact or phantasy, one now realizes the capacity to harm or drive away a person who one ambivalently loves. The defenses characteristic of the depressive position include the manic defenses, repression and reparation. The manic defenses are the same defenses evidenced in the paranoid-schizoid position, but now mobilized to protect the mind from depressive anxiety. As the depressive position brings about an increasing integration in the ego, earlier defenses change in character, becoming less intense and allow increasing awareness of psychic reality.:73

In working through depressive anxiety, projections are withdrawn, allowing the other more autonomy, reality, and a separate existence:16 The infant, whose destructive phantasies were directed towards the bad mother who frustrated, now begins to realize that bad and good, frustrating and satiating, it is always the same mother. Unconscious guilt
for destructive phantasies arises in response to the continuing love and attention provided by caretakers.

[As] fears of losing the loved one become active, a very important step is made in the development. These feelings of guilt and distress now enter as a new element into the emotion of love. They become an inherent part of love, and influence it profoundly both in quality and quantity.:65

From this developmental milestone come a capacity for sympathy, responsibility to and concern for others, and an ability to identify with the subjective experience of people one cares about.:65-66 With the withdrawal of the destructive projections, repression of the aggressive impulses takes place.:72-73. The child allows caretakers a more separate existence, which facilitates increasing differentiation of inner and outer reality. Omnipotence is lessened, which corresponds to a decrease in guilt and the fear of loss.:16

When all goes well, the developing child is able to comprehend that external others are autonomous people with their own needs and subjectivity.

Previously, extended absences of the object (the good breast, the mother) was experienced as persecutory, and, according to the theory of unconscious phantasy, the persecuted infant phantizes destruction of the bad object. The good object who then arrives is not the object which did not arrive. Likewise, the infant who destroyed the bad object is not the infant who loves the good object.

In phantasy, the good internal mother can be psychically destroyed by the aggressive impulses. It is crucial that the real parental figures are around to demonstrate the continuity of their love. In this way, the child perceives that what happens to good objects in phantasy does not happen to them in reality. Psychic reality is allowed to evolve as a place separate from the literalness of the physical world.

Through repeated experience with good enough parenting, the internal image that the child has of external others, that is the child’s internal object, is modified by experience and the image transforms, merging experiences of good and bad which becomes more similar to the real object (e.g. the mother, who can be both good and bad). In Freudian terms, the pleasure principle is modified by the reality principle.

Melanie Klein saw this surfacing from the depressive position as a requisite for social life. Moreover, she viewed the establishment of an inside and an outside world as the start of interpersonal relationships.

Klein argued that people who never succeed in working through the depressive position in their childhood will, as a result, continue to struggle with this problem in adult life. For example: the cause that a person may maintain suffering from intense guilt feelings over the death of a loved one, may be found in the unworked-through depressive position. The guilt is there because of a lack of separation between inside and outside and also as a defense mechanism to defend the self against unbearable feelings of intense sadness and
sorrow and subsequently the internal object against the unbearable rage of the self, which can destroy the (internal) object forever.

**Further thinking regarding the positions**

Wilfred Bion articulates the dynamic nature of the positions, a point emphasised by Thomas Ogden, and expanded by John Steiner in terms of "The equilibrium between the paranoid-schizoid and the depressive positions". Ogden and James Grotstein have continued to explore early infantile states of mind, and incorporating the work of Donald Meltzer, Ester Bick and others, postulate a position preceding the paranoid-schizoid. Grotstein, following Bion, also hypothesizes a transcendent position which emerges following attainment of the depressive position. This aspect of both Ogden and Grotstein's work remains controversial for many within classical object relations theory.

**Death drive**

Sigmund Freud developed the concept object relation to describe or emphasize that bodily drives satisfy their need through a medium, an object, on a specific locus. The central thesis in Melanie Klein's object relations theory was that objects play a decisive role in the development of a subject and can be either part-objects or whole-objects, i.e. a single organ (a mother's breast) or a whole person (a mother). Consequently both a mother or just the mother's breast can be the locus of satisfaction for a drive. Furthermore, according to traditional psychoanalysis, there are at least two types of drives, the libido (mythical counterpart: Eros), and the death drive (mythical counterpart: Thanatos). Thus, the objects can be receivers of both love and hate, the affective effects of the libido and the death drive.

**Influences on art**

Destruction of the Father by Louise Bourgeois speaks of her experience with a male dominated household, in which she was not allowed to speak her mind freely. The work, abstracted and unobvious, is about her physically wanting to eat her father because of the frustration he caused her as a child. This relates to the part of the theory in which the infant will exhibit biting and chewing tendencies as an act of frustration.

Kelly Jacobson's Origin of Mouthstones exhibited deteriorated mouths with only the leave teeth or method for biting and chewing. That paired with her silent video of inaudible speech point to lack of communication and perceived result of frustration. This piece is an important member of the group because, besides trying to communicate a metaphorical idea, this piece is actually speaking of the act of communication.

**Continuing developments in the theory**

Attachment theory, researched by John Bowlby and others, has continued to deepen our understanding of early object relationships. While a different strain of psychoanalytic theory and research, the findings in attachment studies have continued to support the validity of the developmental progressions described in object relations. Recent decades in
developmental psychological research, for example on the onset of a "theory of mind" in children, has suggested that the formation of the mental world is enabled by the infant-parent interpersonal interaction which was the main thesis of British object-relations tradition (e.g. Fairbairn, 1952).

**Self psychology**

Self Psychology is a school of psychoanalytic theory and therapy created by Heinz Kohut and developed in the United States at the Chicago Institute for Psychoanalysis. Self psychology explains psychopathology as being the result of disrupted or unmet developmental needs. Essential to understanding Self psychology are the concepts of empathy, self-object, mirroring, idealising, alter ego/twinship and the triplex self. Though self psychology also recognizes certain drives, conflicts and complexes present in Freudian psychodynamic theory, these are understood within a different framework.

**Origins**

Kohut came to psychoanalysis by way of neurology and psychiatry in the 1940s, but then 'embraced analysis with the fervor of a convert...[and as] "Mr Psychoanalysis"' took on an idealizing image of Freud and his theories. Subsequently 'In a burst of creativity that began in the mid-1960s...Kohut found his voice and explored narcissism in new ways that led to what he ended up calling a "psychology of the self".' Thus the publication of 'his book The Analysis of the Self[1971]...was what Kuhn would call a new paradigm.'

Kohut argued that therapy should be more involved with the patient than with analytical theories. In other words, to make therapy work, one needs to address the patient’s self.

**Concepts**

**Self**

Beginning by 'applying general psychoanalytic principles to narcissistic transferences, he [Kohut] went on to inventing a whole "psychology of the self".' Kohut's concept of self, and "defects" in it, is the core variable of self-psychology, where superego/ego/id and oedipal conflicts could be considered to be the core of Freudian theory. Kohut came to distinguish four key components in the development of the self: the nuclear, virtual, cohesive and grandiose selves.

'Kohut argued that normal human infants are born with a nuclear self already in place (a biologically determined psychological entity). That self then encountered what he called 'the virtual self (an image of the newborn's self, which resides in the minds of the infant's parents). In optimal circumstances, the interaction of nuclear and virtual selves would lead to the child's gradual organization of a cohesive self' - to the point where ideally 'a living self in depth has become the organizing center of the ego's activities.' Along the way, however, would be the appearance of 'the grandiose self...the self that emerges out of the
normal infantile experience of oneself as the centre of all experience, omnipotent' - in Freud's words, 'His Majesty the Baby, as we once fancied ourselves.'

For the self-psychologist, psychopathology is viewed in regard to how the self adapts and reacts to other objects; and in the therapy, the patient’s self is also examined for indications of to how to approach the patient.

**Empathy**

Kohut maintained that parents' failures to empathize with their children and the responses of their children to these failures were 'at the root of almost all psychopathology.' For Kohut, the loss of the other and the other's self-object function (see below) leaves the individual apathetic, lethargic, empty of the feeling of life, without vitality, in short, depressed.

For the infant to move from grandiose to cohesive self and beyond, meant a slow process of disillusionment with phantasies of omnipotence, mediated by the parents: 'This process of gradual and titrated disenchantment requires that the infant's caretakers be empathetically attuned to the infant's needs'.

Correspondingly, to deal in therapy with earlier failures in the disenchantment process, Kohut 'highlights empathy as the tool par excellence, which allows the creation of a relationship between patient and analyst that can offer some hope of mitigating early self pathology'.

Kohut describes human empathy as a therapeutic skill. When a patient acts in a certain way, "put yourself in his/her shoes" - and find out how it feels for the patient to act in this manner.

Using the skill of empathy, the therapist is able to reach conclusions sooner (with less dialogue and interpretation), and there is also a stronger bond between patient and therapist, making the patient feel more fundamentally understood. For Kohut, the implicit bond of empathy itself has a curative effect; but he also warned that 'the psychoanalyst...must also be able to relinquish the empathic attitude' to maintain intellectual integrity, and that 'empathy, especially when it is surrounded by an attitude of wanting to cure directly...may rest on the therapist’s unresolved omnipotence fantasies'.

The conceptual introduction of empathy was not intended to be a "discovery." Empathic moments in psychology existed long before Kohut. Instead, Kohut posited that empathy in psychology should be acknowledged as a powerful therapeutic tool, extending beyond "hunches" and vague "assumptions," and enabling empathy to be described, taught, and used more actively.
Self-object

Self-objects are external objects that function as part of the "self machinery" - 'i.e., objects which are not experienced as separate and independent from the self.' They are persons, objects or activities that "complete" the self, and which are necessary for normal functioning. 'Kohut describes early interactions between the infant and his caretakers as involving the infant's "self" and the infant's "self-objects".

Observing the patient's self-object connections is a fundamental part of self-psychology. For instance, a person's particular habits, choice of education and work, taste in life partners, may fill a self-object-function for that particular individual.

Self-objects are addressed throughout Kohut's theory, and include everything from the transference phenomenon in therapy, relatives, and items (for instance Linus van Pelt's security blanket): they 'thus cover the phenomena which were described by Winnicott as transitional objects. Among 'the great variety of self-object relations that support the cohesion, vigor, and harmony of the adult self...[are] cultural self-objects (the writers, artists, and political leaders of the group - the nation, for example - to which a person feels he belongs).'</p>

If psychopathology is explained as an "incomplete" or "defect" self, then the self-objects might be described as a self-prescribed "cure".

As described by Kohut, the self-object-function (i.e. what the self-object does for the self) is taken for granted and seems to take place in a "blindzone." The function thus usually does not become "visible" until the relation with the self-object is somehow broken.

When a relationship is established with a new self-object, the relationship connection can "lock in place" quite powerfully, and the pull of the connection may affect both self and self-object. Powerful transference, for instance, is an example of this phenomenon.

Optimal frustration

When a self-object is needed, but not accessible, this will create a potential problem for the self, referred to as a "frustration" - as with 'the traumatic frustration of the phase appropriate wish or need for parental acceptance...intense narcissistic frustration.'

The contrast is what Kohut called "optimal frustration"; and he considered that, 'as holds true for the analogous later milieu of the child, the most important aspect of the earliest mother-infant relationship is the principle of optimal frustration. Tolerable disappointments...lead to the establishment of internal structures which provide the basis for self-soothing.'
In a parallel way, Kohut considered that the 'skilful analyst will...conduct the analysis according to the principle of optimal frustration.'

Suboptimal frustrations, and maladaptations following them, may be compared to Freud's trauma concept, or to problem solution in the oedipal phase. However, the scope of optimal (or other) frustration describes shaping every "nook and cranny" of the self, rather than a few dramatic conflicts.

**Idealizing**

Kohut saw idealizing as a central aspect of early narcissism. 'The therapeutic activation of the omnipotent object (the idealized parent imago)...referred to as the idealizing transference, is the revival during psychoanalysis' of the very early need to establish a mutual self-object connection with an object of idealization.

In terms of 'the Kleinian school...the idealizing transference may cover some of the territory of so-called projective identification.'

For the young child, 'idealized self-objects "provide the experience of merger with the calm, power, wisdom, and goodness of idealized persons".'

**Alter ego/twinship needs**

Alter ego/twinship needs refer to the desire in early development to feel likeness to other human beings. Freud had early noted that 'The idea of the "double"...sprung from the soil of unbounded self-love, from the primary narcissism which holds sway in the mind of the child.' Lacan highlighted 'the mirror stage...of a normal transitivity. The child who strikes another says that he has been struck; the child who sees another fall, cries.' In 1960, 'Arlow observed, "The existence of another individual who is a reflection of the self brings the experience of twinship in line with the psychology of the double, of the mirror image and of the double".'

Kohut pointed out that 'fantasies, referring to a relationship with such an alter ego or twin (or conscious wishes for such a relationship) are frequently encountered in the analysis of narcissistic personalities', and termed their transference activation 'the alter-ego transference or the twinship.'

As development continues, so a greater degree of difference from others can be accepted.

**The tripolar self**

The tripolar self is not associated with bipolar disorder, but is the sum of the three "poles" of the body:

- "grandiose-exhibitionistic needs"
- "the need for an omnipotent idealized figure"
"alter-ego needs"

Kohut argued that reactivation of the grandiose self in analysis occurs in three forms: these relate to specific stages of development: (1) The archaic merger through the extension of the grandiose self; (2) a less archaic form which will be called alter-ego transference or twinship; and (3) a still less archaic form...mirror transference.

Alternately, self psychologists...divide the self-object transference into three groups: (1) those in which the damaged pole of ambitions attempts to elicit the confirming-approving response of the self-object (mirror transference); (2) those in which the damaged pole of ideals searches for a self-object that will accept its idealisation (idealising transference); and those in which the damaged intermediate area of talents and skills seeks...alter ego transference.

The tripolar self forms as a result of the needs of an individual binding with the interactions of other significant persons within the life of that individual.

Cultural implications

An interesting application of self psychology has been in the interpretation of the friendship of Freud and Jung, its breakdown, and its aftermath. It has been suggested that at the height of the relationship 'Freud was in narcissistic transference, that he saw in Jung an idealised version of himself,' and that conversely in Jung there was a double mix of 'idealization of Freud and grandiosity in the self.'

During Jung's midlife crisis, after his break with Freud, arguably 'the focus of the critical years had to be a struggle with narcissism: the loss of an idealized other, grandiosity in the sphere of the self, and resulting periods of narcissistic rage.' Only as he worked through to 'a new sense of himself as a person separate from Freud' could Jung emerge as an independent theorist in his own right.

On the assumption that 'the western self is embedded in a culture of narcissism...implicated in the shift towards postmodernity', opportunities for making such applications will probably not decrease in the foreseeable future.

Criticism

Kohut, who was 'the center of a fervid cult in Chicago', aroused at times almost equally fervent criticism and opposition, emanating from at least three other directions: drive theory, Lacanian psychoanalysis, and object relations theory.

From the perspective of drive theory, Kohut appears 'as an important contributor to analytic technique and as a misguided theoretician...introduces assumptions that simply clutter up basic theory. The more postulates you make, the less their explanatory power becomes.' Offering no technical advances on standard analytic methods in 'his breathtakingly unreadable The Analysis of the Self', Kohut simply seems to blame parental
deficit for all childhood difficulties, disregarding the inherent conflicts of the drives: 'Where the orthodox Freudian sees sex everywhere, the Kohutian sees empathic mothers everywhere - even in sex.'

To the Lacanian, Kohut's exclusive 'concern with the imaginary', to the exclusion of the Symbolic meant that 'not only the patient's narcissism is in question here, but also the analyst's narcissism.' The danger in 'the concept of the sympathetic or empathic analyst who is led astray towards an ideal of devotion and Samaritan helping...[ignoring] its sadistic underpinnings' seemed only too clear.

From an object relations perspective, Kohut 'allows no place for internal determinants. The predicate is that a person's psychopathology is due to unattuned self-objects, so all the bad is out there and we have a theory with a paranoid basis.' At the same time, 'any attempt at "being the better parent" has the effect of deflecting, even seducing, a patient from using the analyst or therapist in a negative transference...the empathic analyst, or "better" parent.'

With the passage of time, and the eclipse of grand narrative, it may now be possible to see the several strands of psychoanalytic theory less as fierce rivals and more 'as complementary partners. Drive psychology, ego psychology, object relations psychology and self psychology each have important insights to offer twenty-first-century clinicians.'

**True self and false self**

True self and false self are terms introduced into psychoanalysis by D. W. Winnicott in 1960. Winnicott 'contrasts a basic True Self with a False Self, the latter a self-protective mechanism....The true self feeling involves a sense of all out personal aliveness...feeling real'.

'Winnicott conceives of a "false self" that an infant develops in despairing defence against the trauma of inadequate maternal care; the analytic task is to give the "true self", which can feel and is cowering behind the "false self", which cannot, the strength to emerge'.

**Before Winnicott**

There was much in psychoanalytic theory on which Winnicott could draw for his concept of the False Self. Helene Deutsch had described the "as if" personalities who have 'succeeded in substituting "pseudo contacts" of manifold kinds for a real feeling contact with other people: they behave "as if" they have feeling contacts with people'. Winnicott's own analyst, Joan Riviere, had memorably explored the concept of the masquerade - of 'the mask of the narcissist..."the trait of deceptiveness...the mask, which conceals this subtle reservation of all control under intellectual rationalizations, or under feigned compliance and superficial politeness"'. Freud himself, with his late theory of 'the ego as constituted in its nucleus by a series of alienating identifications', had produced a theory of 'the Ego, which does bear some comparison with the False Self'.
Winnicott

Despite its many antecedents, it would be wrong to underestimate the quiet conceptual revolution offered by Winnicott’s 1960 article, which offered a fresh and compelling, clinically-rooted picture of the human mind.

For Winnicott, in the False Self, 'Other people's expectations can become of overriding importance, overlaying or contradicting the original sense of self, the one connected to the very roots of one’s being'. The danger is that 'through this False Self, the infant builds up a false set of relationships, and by means of introjections even attains a show of being real'. The result can be a 'child whose potential aliveness and creativity has gone unnoticed...concealing an empty, barren internal world behind a mask of independence'. Yet at the same time the 'Winnicottian False Self is the ultimate defence against the unthinkable "exploitation of the True Self, which would result in its annihilation"'.

By contrast, the True Self is rooted in, and "does no more than collect together the details of the experience of aliveness" - this means the body's life-sustaining functions, "including the heart's action and breathing". Out of this the baby creates the experience of reality: a sense that "Life is worth the trouble of living". In the baby's nonverbal gesture which '...expresses a spontaneous instinct', the true self potential can be communicated to, and affirmed by, the motherer.

'The False Self in its pathological guise prevents and inhibits what Winnicott calls the "spontaneous gesture" of the True Self. Compliance and imitation are the costly results'. Some would indeed consider that 'the idea of compliance is central to Winnicott’s theory of the false self', and add, paradoxically, that 'concern for an object is easily a compliant act'. Where the motherer is not responsive to the baby's spontaneity, where instead 'a mother's expectations are too insistent, they can eventually result in compliant behaviour and an impaired autonomy', as the baby has 'to manage a prematurely important object....The False Self enacts a kind of dissociated regard or recognition of the object; the object is taken seriously, is shown concern, but not by a person'.

It has been suggested that 'in pathology, Winnicott’s distinction between "true and false selves" corresponds to Balint’s "basic fault" and to Fairbairn’s "compromised ego"'.

One persistent criticism of Winnicott’s theory of is that it was not theoretically integrated. Neville Sympington writes: "Most clinicians ... when they have a clinical insight, they simply paste it onto existing theory. ... Winnicott did the same with the true and false self: he did not ask himself how the theory fitted with ego and id." Similarly Jean-Bertrand Pontalis and Maud Mannoni are very reserved about the theoretical implication of Winnicott’s true/false self distinction, but they acknowledge the justice of his clinical observations.

Further developments
The last half-century have seen Winnicott's ideas extended and applied in a variety of contexts, both in psychoanalysis and beyond.

**Kohut**

It has been suggested that 'Kohut offers essentially the same program' as Winnicott in his descriptions of 'the narcissistic disorders in which he specializes...Like Winnicott's "false-self" patients, these patients develop a shoddy armor (of a "defensive" or "compensatory" character) around their maimed inner core'. Kohut himself has noted that his work "overlaps" with Winnicott's investigations, and others have 'regarded Kohut's contribution to psychoanalysis to be an extension of Winnicott's work'.

Thus Kohut emphasises that 'to be...the maintenance of even the diseased remnants of the self is preferable to not being, that is, to accept the takeover of another's personality rather than his actively elicited responsiveness'. Similarly, he stressed that 'there is a decisive difference between the support of self-objects that are sought after and chosen by a self in harmony with its innermost ideals...and the abandoning of oneself to a foreign self, through which one gains borrowed cohesion at the price of genuine initiative and creative participation in life'.

**Lowen**

Alexander Lowen identified narcissists as having a true and a false, or superficial, self. The false self rests on the surface, as the self presented to the world. It stands in contrast to the true self, which resides behind the facade or image. This true self is the feeling self, but it is a self that must be hidden and denied. Since the superficial self represents submission and conformity, the inner or true self is rebellious and angry. This underlying rebellion and anger can never be fully suppressed since it is an expression of the life force in that person. But because of the denial, it cannot be expressed directly. Instead it shows up in the narcissist's acting out. And it can become a perverse force.

**Masterson**

James F. Masterson argued all the personality disorders crucially involve the conflict between a person's two "selves": the false self, which the very young child constructs to please the mother, and the true self. The psychotherapy of personality disorders is an attempt is to put people back in touch with their real selves.

**Symington**

Jungians have explored how 'the narcissistic longings of mothers (or fathers) to amass reflected glory through their children' can result in a situation where 'in place of autonomy, the adult...would come to obey an internal source that the psychoanalyst Neville Symington calls the "discordant source"'. Symington contrasted 'two poles: one in which I am the source of my own action, where I have a creative capacity that comes from my own source of action, and the other in which an inner figure opposed to myself is the source of action.
He termed the twin 'sources of action the "autonomous source" and the "discordant source"', and acknowledged that 'although the formulation is different, it is along the lines of what Winnicott talks about - the true self and the false self'.

His main criticism of Winnicott concerned the initial adoption or internalisation of the discordant source - wanting 'to stress that an intentional identification is what brings about the donning of the false self. Winnicott leaves out this intentional aspect in his description of its origins'.

Persona and false self

Jungians have explored 'to what extent Jung's concept of the persona overlaps with Winnicott's concept of the False Self' - noting the way 'the antecedents of such persona-identification in the individual's life-history are usually quite similar to those of the False Self'. However most would agree that it is only 'when the persona is excessively rigid or defensive...[that] the persona then develops into a pathological false self'.

Stern's tripartite self

In The Interpersonal World of the Infant, Daniel Stern considered 'the sense of physical cohesion (..."going on being", in Winnicott's term)' as essential to what he called the Core Self - providing 'an affective core to the prerepresentational self'. He also explored how selective maternal attunement could create 'two versions of reality....Language becomes available to ratify the split and confer the privileged status of verbal representation upon the false self', so that 'the true self becomes a conglomerate of disavowed experiences of self which cannot be linguistically coded'.

However 'in place of true self and false self, Stern suggests the adoption of a tri-partite vocabulary: the social self, the private self and the disavowed self'.

Lacanian psychoanalysis

Jacques Marie Émile Lacan (April 13, 1901 – September 9, 1981) was a French psychoanalyst and psychiatrist who made prominent contributions to psychoanalysis and philosophy, and has been called "the most controversial psycho-analyst since Freud". Giving yearly seminars in Paris from 1953 to 1981, Lacan influenced France's intellectuals in the 1960s and the 1970s, especially the post-structuralist philosophers. His interdisciplinary work was as a "self-proclaimed Freudian..."It is up to you to be Lacanians if you wish. I am a Freudian"; and featured the unconscious, the castration complex, the ego, identification, and language as subjective perception. His ideas have had a significant impact on critical theory, literary theory, 20th-century French philosophy, sociology, feminist theory, film theory and clinical psychoanalysis.

Major concepts
Return to Freud

Lacan’s "return to Freud" emphasizes a renewed attention to the original texts of Freud, and included a radical critique of Ego psychology, whereas "Lacan’s quarrel with Object Relations psychoanalysis" was a more muted affair. Here he attempted "to restore to the notion of the Object Relation... the capital of experience that legitimately belongs to it", building upon what he termed "the hesitant, but controlled work of Melanie Klein... Through her we know the function of the imaginary primordial enclosure formed by the imago of the mother's body", as well as upon "the notion of the transitional object, introduced by D. W. Winnicott... a key-point for the explanation of the genesis of fetishism". Nevertheless, "Lacan systematically questioned those psychoanalytic developments from the 1930s to the 1970s, which were increasingly and almost exclusively focused on the child's early relations with the mother... the pre-Oedipal or Kleinian mother"; and Lacan's rereading of Freud — "characteristically, Lacan insists that his return to Freud supplies the only valid model" — formed a basic conceptual starting-point in that oppositional strategy.

Lacan thought that Freud's ideas of "slips of the tongue," jokes, and the interpretation of dreams all emphasized the agency of language in subjective constitution. In "The Agency of the Letter in the Unconscious, or Reason Since Freud," he proposes that "the unconscious is structured like a language." The unconscious is not a primitive or archetypal part of the mind separate from the conscious, linguistic ego, he explained, but rather a formation as complex and structurally-sophisticated as consciousness itself. One consequence of the unconscious being structured like a language is that the self is denied any point of reference to which to be "restored" following trauma or a crisis of identity.

Andre Green objected that "when you read Freud, it is obvious that this proposition doesn't work for a minute. Freud very clearly opposes the unconscious (which he says is constituted by thing-presentations and nothing else) to the pre-conscious. What is related to language can only belong to the pre-conscious". Freud certainly contrasted "the presentation of the word and the presentation of the thing... the unconscious presentation is the presentation of the thing alone" in his metapsychology. However "Dylan Evans, Dictionary of Lacanian Psychoanalysis... takes issue with those who, like Andre Green, question the linguistic aspect of the unconscious, emphasizing Lacan's distinction between das Ding and die Sache in Freud's account of thing-presentation".

Mirror stage

Lacan's first official contribution to psychoanalysis was the mirror stage, which he described as "formative of the function of the I as revealed in psychoanalytic experience." By the early 1950s, he came to regard the mirror stage as more than a moment in the life of the infant; instead, it formed part of the permanent structure of subjectivity. In "the Imaginary order," his or her own image permanently catches and captivates the subject. Lacan explains that "the mirror stage is a phenomenon to which I assign a twofold value. In the first place, it has historical value as it marks a decisive turning-point in the mental development of the child. In the second place, it typifies an essential libidinal relationship with the body-image".
As this concept developed further, the stress fell less on its historical value and more on its structural value. In his fourth Seminar, "La relation d'objet," Lacan states that "the mirror stage is far from a mere phenomenon which occurs in the development of the child. It illustrates the conflictual nature of the dual relationship."

The mirror stage describes the formation of the Ego via the process of objectification, the Ego being the result of a conflict between one's perceived visual appearance and one's emotional experience. This identification is what Lacan called alienation. At six months, the baby still lacks physical co-ordination. The child is able to recognize himself or herself in a mirror prior to the attainment of control over his or her bodily movements. The child sees his or her image as a whole and the synthesis of this image produces a sense of contrast with the lack of co-ordination of the body, which is perceived as a fragmented body. The child experiences this contrast initially as a rivalry with his or her own image, because the wholeness of the image threatens the child with fragmentation—thus the mirror stage gives rise to an aggressive tension between the subject and the image. To resolve this aggressive tension, the child identifies with the image: this primary identification with the counterpart forms the Ego. Lacan understands this moment of identification as a moment of jubilation, since it leads to an imaginary sense of mastery; yet when the child compares his or her own precarious sense of mastery with the omnipotence of the mother, a depressive reaction may accompany the jubilation.

Lacan calls the specular image "orthopaedic," since it leads the child to anticipate the overcoming of its "real specific prematurity of birth." The vision of the body as integrated and contained, in opposition to the child's actual experience of motor incapacity and the sense of his or her body as fragmented, induces a movement from "insufficiency to anticipation." In other words, the mirror image initiates and then aids, like a crutch, the process of the formation of an integrated sense of self.

In the mirror stage a "misunderstanding" (méconnaissance) constitutes the Ego—the "me" (moi) becomes alienated from itself through the introduction of an imaginary dimension to the subject. The mirror stage also has a significant symbolic dimension, due to the presence of the figure of the adult who carries the infant. Having jubilantly assumed the image as his or her own, the child turns his or her head towards this adult, who represents the big Other, as if to call on the adult to ratify this image.

**Other/other**

While Freud uses the term "other", referring to der Andere (the other person) and "das Andere" (otherness), under the influence of Alexandre Kojève, Lacan's use is closer to Hegel's.

Lacan often used an algebraic symbology for his concepts: the big Other is designated A (for French Autre) and the little other is designated a (italicized French autre). He asserts that an awareness of this distinction is fundamental to analytic practice: "the analyst must be
imbued with the difference between A and a, so he can situate himself in the place of Other, and not the other." Dylan Evans explains that:

"1. **The little other** is the other who is not really other, but a reflection and projection of the Ego. He [autre] is simultaneously the counterpart and the specular image. The little other is thus entirely inscribed in the imaginary order.

2. **The big Other** designates radical alterity, an other-ness which transcends the illusory otherness of the imaginary because it cannot be assimilated through identification. Lacan equates this radical alterity with language and the law, and hence the big Other is inscribed in the order of the symbolic. Indeed, the big Other is the symbolic insofar as it is particularized for each subject. The Other is thus both another subject, in his radical alterity and unassimilable uniqueness, and also the symbolic order which mediates the relationship with that other subject."

"The Other must first of all be considered a locus," Lacan writes, "the locus in which speech is constituted". We can speak of the Other as a subject in a secondary sense only when a subject occupies this position and thereby embodies the Other for another subject.

In arguing that speech originates not in the Ego nor in the subject but rather in the Other, Lacan stresses that speech and language are beyond the subject’s conscious control. They come from another place, outside of consciousness—"the unconscious is the discourse of the Other." When conceiving the Other as a place, Lacan refers to Freud’s concept of psychical locality, in which the unconscious is described as "the other scene".

"It is the mother who first occupies the position of the big Other for the child," Dylan Evans explains, "it is she who receives the child’s primitive cries and retroactively sanctions them as a particular message". The castration complex is formed when the child discovers that this Other is not complete because there is a "Lack (manque)" in the Other. This means that there is always a signifier missing from the trove of signifiers constituted by the Other. Lacan illustrates this incomplete Other graphically by striking a bar through the symbol A; hence another name for the castrated, incomplete Other is the "barred Other."

Feminists thinkers have both utilised and criticised Lacan’s concepts of castration and the Phallus. Some feminists have argued that Lacan’s phallocentric analysis provides a useful means of understanding gender biases and imposed roles, while other feminist critics, most notably Luce Irigaray, accuse Lacan of maintaining the sexist tradition in psychoanalysis. For Irigaray, the Phallus does not define a single axis of gender by its presence/absence; instead, gender has two positive poles. Like Irigaray, Jacques Derrida, in criticising Lacan’s concept of castration, discusses the phallus in a chiasmus with the hymen, as both one and other. Other feminists, such as Judith Butler, Jane Gallop, and Elizabeth Grosz, have interpreted Lacan’s work as opening up new possibilities for feminist theory.

**The three orders**
The Imaginary

The Imaginary is the field of images and imagination, and deception. The main illusions of this order are synthesis, autonomy, duality, and similarity. Lacan thought that the relationship created within the mirror stage between the Ego and the reflected image means that the Ego and the Imaginary order itself are places of radical alienation: "alienation is constitutive of the Imaginary order." This relationship is also narcissistic.

In The Four Fundamental Concepts of Psychoanalysis, Lacan argues that the Symbolic order structures the visual field of the Imaginary, which means that it involves a linguistic dimension. If the signifier is the foundation of the Symbolic, the signified and signification are part of the Imaginary order. Language has Symbolic and Imaginary connotations—in its Imaginary aspect, language is the "wall of language" that inverts and distorts the discourse of the Other. On the other hand, the Imaginary is rooted in the subject's relationship with his or her own body (the image of the body). In Fetishism: the Symbolic, the Imaginary and the Real, Lacan argues that in the sexual plane the Imaginary appears as sexual display and courtship love.

Insofar as identification with the analyst is the objective of analysis, Lacan accused major psychoanalytic schools of reducing the practice of psychoanalysis to the Imaginary order. Instead, Lacan proposes the use of the Symbolic to dislodge the disabling fixations of the Imaginary—the analyst transforms the images into words. "The use of the Symbolic," he argued, "is the only way for the analytic process to cross the plane of identification."

The Symbolic

In his Seminar IV, "La relation d'objet," Lacan argues that the concepts of "Law" and "Structure" are unthinkable without language—thus the Symbolic is a linguistic dimension. This order is not equivalent to language, however, since language involves the Imaginary and the Real as well. The dimension proper to language in the Symbolic is that of the signifier—that is, a dimension in which elements have no positive existence, but which are constituted by virtue of their mutual differences.

The Symbolic is also the field of radical alterity—that is, the Other; the unconscious is the discourse of this Other. It is the realm of the Law that regulates desire in the Oedipus complex. The Symbolic is the domain of culture as opposed to the Imaginary order of nature. As important elements in the Symbolic, the concepts of death and lack (manque) connive to make of the pleasure principle the regulator of the distance from the Thing ("das Ding an sich") and the death drive that goes "beyond the pleasure principle by means of repetition"—"the death drive is only a mask of the Symbolic order."

By working in the Symbolic order, the analyst is able to produce changes in the subjective position of the analysand. These changes will produce imaginary effects because the Imaginary is structured by the Symbolic.
The Real

Lacan's concept of the Real dates back to 1936 and his doctoral thesis on psychosis. It was a term that was popular at the time, particularly with Émile Meyerson, who referred to it as "an ontological absolute, a true being-in-itself". Lacan returned to the theme of the Real in 1953 and continued to develop it until his death. The Real, for Lacan, is not synonymous with reality. Not only opposed to the Imaginary, the Real is also exterior to the Symbolic. Unlike the latter, which is constituted in terms of oppositions (i.e. presence/absence), "there is no absence in the Real." Whereas the symbolic opposition "presence/absence" implies the possibility that something may be missing from the Symbolic, "the Real is always in its place." If the Symbolic is a set of differentiated elements (signifiers), the Real in itself is undifferentiated—it bears no fissure. The Symbolic introduces "a cut in the real" in the process of signification: "it is the world of words that creates the world of things—things originally confused in the "here and now" of the all in the process of coming into being." The Real is that which is outside language and that resists symbolization absolutely. In Seminar XI Lacan defines the Real as "the impossible" because it is impossible to imagine, impossible to integrate into the Symbolic, and impossible to attain. It is this resistance to symbolization that lends the Real its traumatic quality. Finally, the Real is the object of anxiety, insofar as it lacks any possible mediation and is "the essential object which is not an object any longer, but this something faced with which all words cease and all categories fail, the object of anxiety par excellence."

Desire

Lacan's conception of desire is central to his theories and follows Freud's concept of Wunsch. The aim of psychoanalysis is to lead the analysand and to uncover the truth about his or her desire, but this is possible only if that desire is articulated. Lacan wrote that "it is only once it is formulated, named in the presence of the other, that desire appears in the full sense of the term." This naming of desire "is not a question of recognizing something which would be entirely given. In naming it, the subject creates, brings forth, a new presence in the world." Psychoanalysis teaches the patient "to bring desire into existence." The truth about desire is somehow present in discourse, although discourse is never able to articulate the entire truth about desire—whenever discourse attempts to articulate desire, there is always a leftover or surplus.

In "The Signification of the Phallus," Lacan distinguishes desire from need and demand. Need is a biological instinct that is articulated in demand, yet demand has a double function: on the one hand, it articulates need, and on the other, acts as a demand for love. Even after the need articulated in demand is satisfied, the demand for love remains unsatisfied. This remainder is desire. For Lacan, "desire is neither the appetite for satisfaction nor the demand for love, but the difference that results from the subtraction of the first from the second." Lacan adds that "desire begins to take shape in the margin in which demand becomes separated from need." Hence desire can never be satisfied, or as Slavoj Žižek puts it, "desire's raison d'être is not to realize its goal, to find full satisfaction, but to reproduce itself as desire."
It is also important to distinguish between desire and the drives. The drives are the partial manifestations of a single force called desire. Lacan's concept of the "objet petit a" is the object of desire, although this object is not that towards which desire tends, but rather the cause of desire. Desire is not a relation to an object but a relation to a lack (manque).

**Drives**

Lacan maintains Freud's distinction between drive (Trieb) and instinct (Instinkt). Drives differ from biological needs because they can never be satisfied and do not aim at an object but rather circle perpetually around it. The true source of jouissance is the repetition of the movement of this closed circuit. Lacan posits the drives as both cultural and symbolic constructs—to him, "the drive is not a given, something archaic, primordial." He incorporates the four elements of the drives as defined by Freud (the pressure, the end, the object and the source) to his theory of the drive's circuit: the drive originates in the erogenous zone, circles round the object, and returns to the erogenous zone. The three grammatical voices structure this circuit:

- the active voice (to see)
- the reflexive voice (to see oneself)
- the passive voice (to be seen)

The active and reflexive voices are autoerotic—they lack a subject. It is only when the drive completes its circuit with the passive voice that a new subject appears. Despite being the "passive" voice, the drive is essentially active: "to make oneself be seen" rather than "to be seen." The circuit of the drive is the only way for the subject to transgress the pleasure principle.

Lacan identifies four partial drives: the oral drive (the erogenous zones are the lips, the partial object the breast), the anal drive (the anus and the faeces), the scopic drive (the eyes and the gaze) and the invocatory drive (the ears and the voice). The first two relate to demand and the last two to desire. If the drives are closely related to desire, they are the partial aspects in which desire is realized—desire is one and undivided, whereas the drives are its partial manifestations.

**Other concepts**

- Name of the Father
- Foreclosure (psychoanalysis)
- Lack (manque)
- Objet petit a
- The graph of desire
- Matheme
- Sinthome
- The Four discourses
"Les Non-dupes errent": Lacan on error and knowledge

Building on Freud's The Psychopathology of Everyday Life, Lacan long argued that "every unsuccessful act is a successful, not to say 'well-turned', discourse", highlighting as well "sudden transformations of errors into truths, which seemed to be due to nothing more than perseverance". In a late seminar, he generalised more fully the psychoanalytic discovery of "truth — arising from misunderstanding", so as to maintain that "the subject is naturally erring... discourse structures alone give him his moorings and reference points, signs identify and orient him; if he neglects, forgets, or loses them, he is condemned to err anew".

Because of "the alienation to which speaking beings are subjected due to their being in language", to survive "one must let oneself be taken in by signs and become the dupe of a discourse... [of] fictions organized in to a discourse". For Lacan, with "masculine knowledge irredeemably an erring", the individual "must thus allow himself to be fooled by these signs to have a chance of getting his bearings amidst them; he must place and maintain himself in the wake of a discourse... become the dupe of a discourse... les Non-dupes errent".

Lacan comes close here to one of the points where "very occasionally he sounds like Thomas Kuhn (whom he never mentions)", with Lacan's "discourse" resembling Kuhn's "paradigm" seen as "the entire constellation of beliefs, values, techniques, and so on shared by the members of a given community" - something reinforced perhaps by Kuhn's approval of "Francis Bacon's acute methodological dictum: 'Truth emerges more readily from error than from confusion'".

Clinical contributions

Variable-length session

The "variable-length psychoanalytic session" was one of Lacan's crucial clinical innovations, and a key element in his conflicts with the IPA, to whom his "innovation of reducing the fifty-minute analytic hour to a Delphic seven or eight minutes (or sometimes even to a single oracular parole murmured in the waiting-room)" was unacceptable. Lacan's variable-length sessions lasted anywhere from a few minutes (or even, if deemed appropriate by the analyst, a few seconds) to several hours. This practice replaced the classical Freudian "fifty minute hour".

With respect to what he called "the cutting up of the 'timing'", Lacan asked the question, "Why make an intervention impossible at this point, which is consequently privileged in this way?" By allowing the analyst’s intervention on timing, the variable-length session removed the patient's—or, technically, "the analysand's"—former certainty as to the length of time that they would be on the couch. When Lacan adopted the practice, "the psychoanalytic establishment were scandalized" — and, given that "between 1979 and 1980 he saw an average of ten patients an hour", it is perhaps not hard to see why: "psychoanalysis reduced to zero", if no less lucrative.
At the time of his original innovation, Lacan described the issue as concerning "the systematic use of shorter sessions in certain analyses, and in particular in training analyses"; and in practice it was certainly a shortening of the session around the so-called "critical moment" which took place, so that critics wrote that 'everyone is well aware what is meant by the deceptive phrase "variable length"... sessions systematically reduced to just a few minutes'. Irrespective of the theoretical merits of breaking up patients' expectations, it was clear that "the Lacanian analyst never wants to 'shake up' the routine by keeping them for more rather than less time".

"Whatever the justification, the practical effects were startling. It does not take a cynic to point out that Lacan was able to take on many more analysands than anyone using classical Freudian techniques... [and] as the technique was adopted by his pupils and followers an almost exponential rate of growth became possible”.

Accepting the importance of "the critical moment when insight arises", object relations theory would nonetheless quietly suggest that "if the analyst does not provide the patient with space in which nothing needs to happen there is no space in which something can happen". Julia Kristeva, if in very different language, would concur that "Lacan, alert to the scandal of the timeless intrinsic to the analytic experience, was mistaken in wanting to ritualize it as a technique of scansion (short sessions)".

**Writings and writing style**

Jacques-Alain Miller is the sole editor of Lacan's seminars, which contain the majority of his life's work. "There has been considerable controversy over the accuracy or otherwise of the transcription and editing", as well as over "Miller's refusal to allow any critical or annotated edition to be published". Despite Lacan's status as a major figure in the history of psychoanalysis, some of his seminars remain unpublished. Since 1984, Miller has been regularly conducting a series of lectures, "L'orientation lacanienne," Miller's teachings have been published in the US by the journal Lacanian Ink.

Lacan claimed that his Écrits were not to be understood rationally, but would rather produce an effect in the reader similar to the sense of enlightenment one might experience while reading mystical texts. Lacan's writing is notoriously difficult, due in part to the repeated Hegelian/Kojèvean allusions, wide theoretical divergences from other psychoanalytic and philosophical theory, and an obscure prose style. For some, "the impenetrability of Lacan's prose... [is] too often regarded as profundity precisely because it cannot be understood". Arguably at least, "the imitation of his style by other 'Lacanian' commentators" has resulted in "an obscurantist antisystematic tradition in Lacanian literature".

The broader psychotherapeutic literature has little or nothing to say about the effectiveness of Lacanian psychoanalysis. Though a major influence on psychoanalysis in France and parts of Latin America, Lacan's influence on clinical psychology in the English-speaking world is negligible, where his ideas are best-known in the arts and humanities.
A notable exception is the works of Dr. Annie G. Rogers (A Shining Affliction; The Unsayable: The Hidden Language of Trauma), which credit Lacanian theory for many therapeutic insights in successfully treating sexually abused young women.

**Criticism**

Alan D. Sokal and Jean Bricmont in their book Fashionable Nonsense have criticised Lacan's use of terms from mathematical fields such as topology, accusing him of "superficial erudition" and of abusing scientific concepts that he does not understand. Other critics have dismissed Lacan's work wholesale. François Roustang called it an "incoherent system of pseudo-scientific gibberish," and quoted linguist Noam Chomsky's opinion that Lacan was an "amusing and perfectly self-conscious charlatan". Dylan Evans, formerly a Lacanian analyst, eventually dismissed Lacanianism as lacking a sound scientific basis and for harming rather than helping patients, and has criticized Lacan's followers for treating his writings as "holy writ." Richard Webster has decried what he sees as Lacan's obscurity, arrogance, and the resultant "Cult of Lacan". Richard Dawkins, in a review of Fashionable Nonsense, said regarding Lacan: "We do not need the mathematical expertise of Sokal and Bricmont to assure us that the author of this stuff is a fake. Perhaps he is genuine when he speaks of non-scientific subjects? But a philosopher who is caught equating the erectile organ to the square root of minus one has, for my money, blown his credentials when it comes to things that I don't know anything about."

Lacan's colleague Daniel Lagache considered that "[Lacan] embodied the analyst's bad conscience. But... a good conscience in a psychoanalyst is no less dangerous". Others have been more forceful, describing him as "The Shrink from Hell... [an] attractive psychopath", and detailing a long list of collateral damage to "patients, colleagues, mistresses, wives, children, publishers, editors and opponents... [as his] lunatic legacy". Certainly many of "the conflicts around Lacan's school and his person" have been linked to the "form of charismatic authority which, in his personal and institutional presence, he so dramatically provoked". Lacan himself defended his approach on the grounds that "psychosis is an attempt at rigor... I am psychotic for the simple reason that I have always tried to be rigorous".

One of the ironies of the linguistic criticism of Lacan in the 1970s and '80s is that cybernetics and artificial life models in the 21st century have reprised his theories, particularly the linguistic basis of the conscious-unconscious interface. Eco hinted at these connections when Artificial Intelligence was in its infancy in the 1980s, and theorists like Johnston have proposed that Lacanian models are an excellent fit with very recent Artificial Life models.

Malcolm Bowie has suggested that Lacan "had the fatal weakness of all those who are fanatic ally against all forms of totalization (the complete picture) in the so-called human sciences: a love of system". Similarly, Jacqueline Rose has argued that "Lacan was implicated in the phallocentrism he described, just as his utterance constantly rejoins the mastery which he sought to undermine". Feminists would then raise the question: "is Lacan, in claiming the law of the father, merely himself in the grip of the Oedipus complex?"
While it is widely recognised that "Lacan was... an intellectual magpie", this was not simply a matter of borrowing from others. Instead, "Lacan was so zealous in invoking other men's work and claiming to base his own arguments on them, when in reality he was departing from their teachings, leaving behind mere skeletons". Even with Freud, it is seldom clearly signposted when Lacan is expounding Freud, when he is reinterpreting Freud, or when he is proposing a completely new theory in Freudian guise. The result was "a complete pattern of dissenting assent to the ideas of Freud... Lacan's argument is conducted on Freud's behalf and, at the same time, against him", so as to leave Lacan himself the "master" of his (and everyone's) thought. "Castoriadis... maintained that Lacan had gradually come to prevent anyone else from thinking because of the way he tried to make all thought dependent on himself".

More personal criticism of his intellectual style is that it depended on a kind of teasing lure — "fundamental truths to be revealed... but always at some further point". In such a (feminist) perspective, "Lacan's sadistic capriciousness reveals the prick behind the Phallus... a narcissistic tease who persuades by means of attraction and resistance, not by orderly systematic discourse". To intimates like Dolto, "Lacan was like a narcissistic and wayward child... All he thought about was himself and his work". Yet if Lacan was a narcissist, if his writings are essentially "the confessions of a self-justifying megalomaniac", fuelled by "Lacan's craving for recognition — his almost demonic hunger" — if they reveal "a narcissistic enjoyment of mystification as a form of omnipotent power... phantasies of narcissistic omnipotence", yet Lacan was clearly one of "what Maccoby calls 'productive narcissists'... [who] get others to buy into their vision and help to make it a reality... the narcissists who change our world".

Analytical Psychology

CARL JUNG

1875 - 1961

Dr. C. George Boeree

Anyone who wants to know the human psyche will learn next to nothing from experimental psychology. He would be better advised to abandon exact science, put away his scholar's gown, bid farewell to his study, and wander with human heart through the world. There in the horrors of prisons,
lunatic asylums and hospitals, in drab suburban pubs, in brothels and
 gambling-hells, in the salons of the elegant, the Stock Exchanges, socialist
 meetings, churches, revivalist gatherings and ecstatic sects, through love and
 hate, through the experience of passion in every form in his own body, he
 would reap richer stores of knowledge than text-books a foot thick could give
 him, and he will know how to doctor the sick with a real knowledge of the
 human soul. -- Carl Jung

Freud said that the goal of therapy was to make the unconscious conscious. He certainly
 made that the goal of his work as a theorist. And yet he makes the unconscious sound very
 unpleasant, to say the least: It is a cauldron of seething desires, a bottomless pit of perverse
 and incestuous cravings, a burial ground for frightening experiences which nevertheless
 come back to haunt us. Frankly, it doesn't sound like anything I'd like to make conscious!
 A younger colleague of his, Carl Jung, was to make the exploration of this "inner space" his
 life's work. He went equipped with a background in Freudian theory, of course, and with an
 apparently inexhaustible knowledge of mythology, religion, and philosophy. Jung was
 especially knowledgeable in the symbolism of complex mystical traditions such as
 Gnosticism, Alchemy, Kabala, and similar traditions in Hinduism and Buddhism. If anyone
 could make sense of the unconscious and its habit of revealing itself only in symbolic form,
 it would be Carl Jung.

He had, in addition, a capacity for very lucid dreaming and occasional visions. In the fall of
 1913, he had a vision of a "monstrous flood" engulfing most of Europe and lapping at the
 mountains of his native Switzerland. He saw thousands of people drowning and civilization
 crumbling. Then, the waters turned into blood. This vision was followed, in the next few
 weeks, by dreams of eternal winters and rivers of blood. He was afraid that he was
 becoming psychotic.

But on August 1 of that year, World War I began. Jung felt that there had been a connection,
 somehow, between himself as an individual and humanity in general that could not be
 explained away. From then until 1928, he was to go through a rather painful process of
 self-exploration that formed the basis of all of his later theorizing.

He carefully recorded his dreams, fantasies, and visions, and drew, painted, and sculpted
 them as well. He found that his experiences tended to form themselves into persons,
 beginning with a wise old man and his companion, a little girl. The wise old man evolved,
 over a number of dreams, into a sort of spiritual guru. The little girl became "anima," the
 feminine soul, who served as his main medium of communication with the deeper aspects
 of his unconscious.

A leathery brown dwarf would show up guarding the entrance to the unconscious. He was
 "the shadow," a primitive companion for Jung's ego. Jung dreamt that he and the dwarf
 killed a beautiful blond youth, whom he called Siegfried. For Jung, this represented a
 warning about the dangers of the worship of glory and heroism which would soon cause so
 much sorrow all over Europe -- and a warning about the dangers of some of his own
 tendencies towards hero-worship, of Sigmund Freud!
Jung dreamt a great deal about the dead, the land of the dead, and the rising of the dead. These represented the unconscious itself -- not the "little" personal unconscious that Freud made such a big deal out of, but a new collective unconscious of humanity itself, an unconscious that could contain all the dead, not just our personal ghosts. Jung began to see the mentally ill as people who are haunted by these ghosts, in an age where no-one is supposed to even believe in them. If we could only recapture our mythologies, we would understand these ghosts, become comfortable with the dead, and heal our mental illnesses. Critics have suggested that Jung was, very simply, ill himself when all this happened. But Jung felt that, if you want to understand the jungle, you can't be content just to sail back and forth near the shore. You've got to get into it, no matter how strange and frightening it might seem.

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**Biography**

Carl Gustav Jung was born July 26, 1875, in the small Swiss village of Kesswil. His father was Paul Jung, a country parson, and his mother was Emilie Preiswerk Jung. He was surrounded by a fairly well educated extended family, including quite a few clergymen and some eccentrics as well.

The elder Jung started Carl on Latin when he was six years old, beginning a long interest in language and literature -- especially ancient literature. Besides most modern western European languages, Jung could read several ancient ones, including Sanskrit, the language of the original Hindu holy books. Carl was a rather solitary adolescent, who didn’t care much for school, and especially couldn’t take competition. He went to boarding school in Basel, Switzerland, where he found himself the object of a lot of jealous harassment. He began to use sickness as an excuse, developing an embarrassing tendency to faint under pressure.

Although his first career choice was archeology, he went on to study medicine at the University of Basel. While working under the famous neurologist Krafft-Ebing, he settled on psychiatry as his career.

After graduating, he took a position at the Burghoeltzli Mental Hospital in Zurich under Eugene Bleuler, an expert on (and the namer of) schizophrenia. In 1903, he married Emma Rauschenbach. He also taught classes at the University of Zurich, had a private practice, and invented word association at this time!

Long an admirer of Freud, he met him in Vienna in 1907. The story goes that after they met, Freud canceled all his appointments for the day, and they talked for 13 hours straight, such was the impact of the meeting of these two great minds! Freud eventually came to see Jung as the crown prince of psychoanalysis and his heir apparent.

But Jung had never been entirely sold on Freud's theory. Their relationship began to cool in 1909, during a trip to America. They were entertaining themselves by analyzing each
others’ dreams (more fun, apparently, than shuffleboard), when Freud seemed to show an excess of resistance to Jung’s efforts at analysis. Freud finally said that they’d have to stop because he was afraid he would lose his authority! Jung felt rather insulted.

World War I was a painful period of self-examination for Jung. It was, however, also the beginning of one of the most interesting theories of personality the world has ever seen.

After the war, Jung traveled widely, visiting, for example, tribal people in Africa, America, and India. He retired in 1946, and began to retreat from public attention after his wife died in 1955. He died on June 6, 1961, in Zurich.

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Theory

Jung’s theory divides the psyche into three parts. The first is the **ego**, which Jung identifies with the conscious mind. Closely related is the **personal unconscious**, which includes anything which is not presently conscious, but can be. The personal unconscious is like most people’s understanding of the unconscious in that it includes both memories that are easily brought to mind and those that have been suppressed for some reason. But it does not include the instincts that Freud would have it include.

But then Jung adds the part of the psyche that makes his theory stand out from all others: the **collective unconscious**. You could call it your "psychic inheritance." It is the reservoir of our experiences as a species, a kind of knowledge we are all born with. And yet we can never be directly conscious of it. It influences all of our experiences and behaviors, most especially the emotional ones, but we only know about it indirectly, by looking at those influences.

There are some experiences that show the effects of the collective unconscious more clearly than others: The experiences of love at first sight, of deja vu (the feeling that you’ve been here before), and the immediate recognition of certain symbols and the meanings of certain myths, could all be understood as the sudden conjunction of our outer reality and the inner reality of the collective unconscious. Grander examples are the creative experiences shared by artists and musicians all over the world and in all times, or the spiritual experiences of mystics of all religions, or the parallels in dreams, fantasies, mythologies, fairy tales, and literature.

A nice example that has been greatly discussed recently is the near-death experience. It seems that many people, of many different cultural backgrounds, find that they have very similar recollections when they are brought back from a close encounter with death. They speak of leaving their bodies, seeing their bodies and the events surrounding them clearly, of being pulled through a long tunnel towards a bright light, of seeing deceased relatives or religious figures waiting for them, and of their disappointment at having to leave this happy scene to return to their bodies. Perhaps we are all "built" to experience death in this fashion.
Archetypes

The contents of the collective unconscious are called **archetypes**. Jung also called them dominants, imagos, mythological or primordial images, and a few other names, but archetypes seems to have won out over these. An archetype is an unlearned tendency to experience things in a certain way.

The archetype has no form of its own, but it acts as an "organizing principle" on the things we see or do. It works the way that instincts work in Freud's theory: At first, the baby just wants something to eat, without knowing what it wants. It has a rather indefinite yearning which, nevertheless, can be satisfied by some things and not by others. Later, with experience, the child begins to yearn for something more specific when it is hungry -- a bottle, a cookie, a broiled lobster, a slice of New York style pizza.

The archetype is like a black hole in space: You only know its there by how it draws matter and light to itself.

The mother archetype

The **mother archetype** is a particularly good example. All of our ancestors had mothers. We have evolved in an environment that included a mother or mother-substitute. We would never have survived without our connection with a nurturing-one during our times as helpless infants. It stands to reason that we are "built" in a way that reflects that evolutionary environment: We come into this world ready to want mother, to seek her, to recognize her, to deal with her.

So the mother archetype is our built-in ability to recognize a certain relationship, that of "mothering." Jung says that this is rather abstract, and we are likely to project the archetype out into the world and onto a particular person, usually our own mothers. Even when an archetype doesn't have a particular real person available, we tend to personify the archetype, that is, turn it into a mythological "story-book" character. This character symbolizes the archetype.

The mother archetype is symbolized by the primordial mother or "earth mother" of mythology, by Eve and Mary in western traditions, and by less personal symbols such as the church, the nation, a forest, or the ocean. According to Jung, someone whose own mother failed to satisfy the demands of the archetype may well be one that spends his or her
life seeking comfort in the church, or in identification with "the motherland," or in meditating upon the figure of Mary, or in a life at sea.

**Mana**

You must understand that these archetypes are not really biological things, like Freud's instincts. They are more spiritual demands. For example, if you dreamt about long things, Freud might suggest these things represent the phallus and ultimately sex. But Jung might have a very different interpretation. Even dreaming quite specifically about a penis might not have much to do with some unfulfilled need for sex.

It is curious that in primitive societies, phallic symbols do not usually refer to sex at all. They usually symbolize **mana**, or spiritual power. These symbols would be displayed on occasions when the spirits are being called upon to increase the yield of corn, or fish, or to heal someone. The connection between the penis and strength, between semen and seed, between fertilization and fertility are understood by most cultures.

**The shadow**

Sex and the life instincts in general are, of course, represented somewhere in Jung's system. They are a part of an archetype called the **shadow**. It derives from our prehuman, animal past, when our concerns were limited to survival and reproduction, and when we weren't self-conscious.

It is the "dark side" of the ego, and the evil that we are capable of is often stored there. Actually, the shadow is amoral -- neither good nor bad, just like animals. An animal is capable of tender care for its young and vicious killing for food, but it doesn't choose to do either. It just does what it does. It is "innocent." But from our human perspective, the animal world looks rather brutal, inhuman, so the shadow becomes something of a garbage can for the parts of ourselves that we can't quite admit to.

Symbols of the shadow include the snake (as in the garden of Eden), the dragon, monsters, and demons. It often guards the entrance to a cave or a pool of water, which is the collective unconscious. Next time you dream about wrestling with the devil, it may only be yourself you are wrestling with!

**The persona**

The **persona** represents your public image. The word is, obviously, related to the word person and personality, and comes from a Latin word for mask. So the persona is the mask you put on before you show yourself to the outside world. Although it begins as an archetype, by the time we are finished realizing it, it is the part of us most distant from the collective unconscious.

At its best, it is just the "good impression" we all wish to present as we fill the roles society requires of us. But, of course, it can also be the "false impression" we use to manipulate
people's opinions and behaviors. And, at its worst, it can be mistaken, even by ourselves, for our true nature: Sometimes we believe we really are what we pretend to be!

Anima and animus

A part of our persona is the role of male or female we must play. For most people that role is determined by their physical gender. But Jung, like Freud and Adler and others, felt that we are all really bisexual in nature. When we begin our lives as fetuses, we have undifferentiated sex organs that only gradually, under the influence of hormones, become male or female. Likewise, when we begin our social lives as infants, we are neither male nor female in the social sense. Almost immediately -- as soon as those pink or blue booties go on -- we come under the influence of society, which gradually molds us into men and women.

In all societies, the expectations placed on men and women differ, usually based on our different roles in reproduction, but often involving many details that are purely traditional. In our society today, we still have many remnants of these traditional expectations. Women are still expected to be more nurturant and less aggressive; men are still expected to be strong and to ignore the emotional side of life. But Jung felt these expectations meant that we had developed only half of our potential.

The anima is the female aspect present in the collective unconscious of men, and the animus is the male aspect present in the collective unconscious of women. Together, they are referred to as syzygy. The anima may be personified as a young girl, very spontaneous and intuitive, or as a witch, or as the earth mother. It is likely to be associated with deep emotionality and the force of life itself. The animus may be personified as a wise old man, a sorcerer, or often a number of males, and tends to be logical, often rationalistic, even argumentative.

The anima or animus is the archetype through which you communicate with the collective unconscious generally, and it is important to get into touch with it. It is also the archetype that is responsible for much of our love life: We are, as an ancient Greek myth suggests, always looking for our other half, the half that the Gods took from us, in members of the opposite sex. When we fall in love at first sight, then we have found someone that "fills" our anima or animus archetype particularly well!

Other archetypes

Jung said that there is no fixed number of archetypes which we could simply list and memorize. They overlap and easily melt into each other as needed, and their logic is not the usual kind. But here are some he mentions:

Besides mother, their are other family archetypes. Obviously, there is father, who is often symbolized by a guide or an authority figure. There is also the archetype family, which represents the idea of blood relationship and ties that run deeper than those based on conscious reasons.
There is also the child, represented in mythology and art by children, infants most especially, as well as other small creatures. The Christ child celebrated at Christmas is a manifestation of the child archetype, and represents the future, becoming, rebirth, and salvation. Curiously, Christmas falls during the winter solstice, which in northern primitive cultures also represents the future and rebirth. People used to light bonfires and perform ceremonies to encourage the sun’s return to them. The child archetype often blends with other archetypes to form the child-god, or the child-hero.

Many archetypes are story characters. The hero is one of the main ones. He is the mana personality and the defeater of evil dragons. Basically, he represents the ego -- we do tend to identify with the hero of the story -- and is often engaged in fighting the shadow, in the form of dragons and other monsters. The hero is, however, often dumb as a post. He is, after all, ignorant of the ways of the collective unconscious. Luke Skywalker, in the Star Wars films, is the perfect example of a hero.

The hero is often out to rescue the maiden. She represents purity, innocence, and, in all likelihood, naivete. In the beginning of the Star Wars story, Princess Leia is the maiden. But, as the story progresses, she becomes the anima, discovering the powers of the force -- the collective unconscious -- and becoming an equal partner with Luke, who turns out to be her brother.

The hero is guided by the wise old man. He is a form of the animus, and reveals to the hero the nature of the collective unconscious. In Star Wars, he is played by Obi Wan Kenobi and, later, Yoda. Notice that they teach Luke about the force and, as Luke matures, they die and become a part of him.

You might be curious as to the archetype represented by Darth Vader, the "dark father." He is the shadow and the master of the dark side of the force. He also turns out to be Luke and Leia’s father. When he dies, he becomes one of the wise old men.

There is also an animal archetype, representing humanity’s relationships with the animal world. The hero’s faithful horse would be an example. Snakes are often symbolic of the animal archetype, and are thought to be particularly wise. Animals, after all, are more in touch with their natures than we are. Perhaps loyal little robots and reliable old spaceships -- the Falcon-- are also symbols of animal.

And there is the trickster, often represented by a clown or a magician. The trickster’s role is to hamper the hero’s progress and to generally make trouble. In Norse mythology, many of the gods’ adventures originate in some trick or another played on their majesties by the half-god Loki.

There are other archetypes that are a little more difficult to talk about. One is the original man, represented in western religion by Adam. Another is the God archetype, representing our need to comprehend the universe, to give a meaning to all that happens, to see it all as having some purpose and direction.
The **hermaphrodite**, both male and female, represents the union of opposites, an important idea in Jung's theory. In some religious art, Jesus is presented as a rather feminine man. Likewise, in China, the character Kuan Yin began as a male saint (the bodhisattva Avalokiteshwar), but was portrayed in such a feminine manner that he is more often thought of as the female goddess of compassion!

The most important archetype of all is the **self**. The self is the ultimate unity of the personality and is symbolized by the circle, the cross, and the **mandala** figures that Jung was fond of painting. A mandala is a drawing that is used in meditation because it tends to draw your focus back to the center, and it can be as simple as a geometric figure or as complicated as a stained glass window. The personifications that best represent self are Christ and Buddha, two people who many believe achieved perfection. But Jung felt that perfection of the personality is only truly achieved in death.

**The dynamics of the psyche**

So much for the content of the psyche. Now let's turn to the principles of its operation. Jung gives us three principles, beginning with the **principle of opposites**. Every wish immediately suggests its opposite. If I have a good thought, for example, I cannot help but have in me somewhere the opposite bad thought. In fact, it is a very basic point: In order to have a concept of good, you must have a concept of bad, just like you can't have up without down or black without white.

This idea came home to me when I was about eleven. I occasionally tried to help poor innocent woodland creatures who had been hurt in some way -- often, I'm afraid, killing them in the process. Once I tried to nurse a baby robin back to health. But when I picked it up, I was so struck by how light it was that the thought came to me that I could easily crush it in my hand. Mind you, I didn't like the idea, but it was undeniably there.

According to Jung, it is the opposition that creates the power (or **libido**) of the psyche. It is like the two poles of a battery, or the splitting of an atom. It is the contrast that gives energy, so that a strong contrast gives strong energy, and a weak contrast gives weak energy.

The second principle is the **principle of equivalence**. The energy created from the opposition is "given" to both sides equally. So, when I held that baby bird in my hand, there was energy to go ahead and try to help it. But there is an equal amount of energy to go ahead and crush it. I tried to help the bird, so that energy went into the various behaviors involved in helping it. But what happens to the other energy?

Well, that depends on your attitude towards the wish that you didn't fulfill. If you acknowledge it, face it, keep it available to the conscious mind, then the energy goes towards a general improvement of your psyche. You grow, in other words.
But if you pretend that you never had that evil wish, if you deny and suppress it, the energy will go towards the development of a complex. A complex is a pattern of suppressed thoughts and feelings that cluster -- constellate -- around a theme provided by some archetype. If you deny ever having thought about crushing the little bird, you might put that idea into the form offered by the shadow (your "dark side"). Or if a man denies his emotional side, his emotionality might find its way into the anima archetype. And so on.

Here's where the problem comes: If you pretend all your life that you are only good, that you don't even have the capacity to lie and cheat and steal and kill, then all the times when you do good, that other side of you goes into a complex around the shadow. That complex will begin to develop a life of its own, and it will haunt you. You might find yourself having nightmares in which you go around stomping on little baby birds!

If it goes on long enough, the complex may take over, may "possess" you, and you might wind up with a multiple personality. In the movie The Three Faces of Eve, Joanne Woodward portrayed a meek, mild woman who eventually discovered that she went out and partied like crazy on Saturday nights. She didn't smoke, but found cigarettes in her purse, didn't drink, but woke up with hangovers, didn't fool around, but found herself in sexy outfits. Although multiple personality is rare, it does tend to involve these kinds of black-and-white extremes.

The final principle is the principle of entropy. This is the tendency for oppositions to come together, and so for energy to decrease, over a person's lifetime. Jung borrowed the idea from physics, where entropy refers to the tendency of all physical systems to "run down," that is, for all energy to become evenly distributed. If you have, for example, a heat source in one corner of the room, the whole room will eventually be heated.

When we are young, the opposites will tend to be extreme, and so we tend to have lots of energy. For example, adolescents tend to exaggerate male-female differences, with boys trying hard to be macho and girls trying equally hard to be feminine. And so their sexual activity is invested with great amounts of energy! Plus, adolescents often swing from one extreme to another, being wild and crazy one minute and finding religion the next.

As we get older, most of us come to be more comfortable with our different facets. We are a bit less naively idealistic and recognize that we are all mixtures of good and bad. We are less threatened by the opposite sex within us and become more androgynous. Even physically, in old age, men and women become more alike. This process of rising above our opposites, of seeing both sides of who we are, is called transcendence.

The self

The goal of life is to realize the self. The self is an archetype that represents the transcendence of all opposites, so that every aspect of your personality is expressed equally. You are then neither and both male and female, neither and both ego and shadow, neither and both good and bad, neither and both conscious and unconscious, neither and
both an individual and the whole of creation. And yet, with no oppositions, there is no energy, and you cease to act. Of course, you no longer need to act.

To keep it from getting too mystical, think of it as a new center, a more balanced position, for your psyche. When you are young, you focus on the ego and worry about the trivialities of the persona. When you are older (assuming you have been developing as you should), you focus a little deeper, on the self, and become closer to all people, all life, even the universe itself. The self-realized person is actually less selfish.

**Synchronicity**

Personality theorists have argued for many years about whether psychological processes function in terms of **mechanism** or **teleology**. Mechanism is the idea that things work in through cause and effect: One thing leads to another which leads to another, and so on, so that the past determines the present. Teleology is the idea that we are lead on by our ideas about a future state, by things like purposes, meanings, values, and so on. Mechanism is linked with determinism and with the natural sciences. Teleology is linked with free will and has become rather rare. It is still common among moral, legal, and religious philosophers, and, of course, among personality theorists.

Among the people discussed in this book, Freidians and behaviorists tend to be mechanists, while the neo-Freidians, humanists, and existentialists tend to be teleologists. Jung believes that both play a part. But he adds a third alternative called **synchronicity**.

Synchronicity is the occurrence of two events that are not linked causally, nor linked teleologically, yet are meaningfully related. Once, a client was describing a dream involving a scarab beetle when, at that very instant, a very similar beetle flew into the window. Often, people dream about something, like the death of a loved one, and find the next morning that their loved one did, in fact, die at about that time. Sometimes people pick up he phone to call a friend, only to find that their friend is already on the line. Most psychologists would call these things coincidences, or try to show how they are more likely to occur than we think. Jung believed the were indications of how we are connected, with our fellow humans and with nature in general, through the collective unconscious.

Jung was never clear about his own religious beliefs. But this unusual idea of synchronicity is easily explained by the Hindu view of reality. In the Hindu view, our individual egos are like islands in a sea: We look out at the world and each other and think we are separate entities. What we don’t see is that we are connected to each other by means of the ocean floor beneath the waters.
The outer world is called maya, meaning illusion, and is thought of as God's dream or God's dance. That is, God creates it, but it has no reality of its own. Our individual egos they call jivatman, which means individual souls. But they, too, are something of an illusion. We are all actually extensions of the one and only Atman, or God, who allows bits of himself to forget his identity, to become apparently separate and independent, to become us. But we never truly are separate. When we die, we wake up and realize who we were from the beginning: God.

When we dream or meditate, we sink into our personal unconscious, coming closer and closer to our true selves, the collective unconscious. It is in states like this that we are especially open to "communications" from other egos. Synchronicity makes Jung's theory one of the rare ones that is not only compatible with parapsychological phenomena, but actually tries to explain them!

**Introversion and extroversion**

Jung developed a personality typology that has become so popular that some people don't realize he did anything else! It begins with the distinction between introversion and extroversion. Introverts are people who prefer their internal world of thoughts, feelings, fantasies, dreams, and so on, while extroverts prefer the external world of things and people and activities.

The words have become confused with ideas like shyness and sociability, partially because introverts tend to be shy and extroverts tend to be sociable. But Jung intended for them to refer more to whether you ("ego") more often faced toward the persona and outer reality, or toward the collective unconscious and its archetypes. In that sense, the introvert is somewhat more mature than the extrovert. Our culture, of course, values the extrovert much more. And Jung warned that we all tend to value our own type most!

We now find the introvert-extrovert dimension in several theories, notably Hans Eysenck's, although often hidden under alternative names such as "sociability" and "surgency."

**The functions**
Whether we are introverts or extroverts, we need to deal with the world, inner and outer. And each of us has our preferred ways of dealing with it, ways we are comfortable with and good at. Jung suggests there are four basic ways, or **functions**: 

The first is **sensing**. Sensing means what it says: getting information by means of the senses. A sensing person is good at looking and listening and generally getting to know the world. Jung called this one of the **irrational** functions, meaning that it involved perception rather than judging of information.

The second is **thinking**. Thinking means evaluating information or ideas rationally, logically. Jung called this a **rational** function, meaning that it involves decision making or judging, rather than simple intake of information.

The third is **intuiting**. Intuiting is a kind of perception that works outside of the usual conscious processes. It is irrational or perceptual, like sensing, but comes from the complex integration of large amounts of information, rather than simple seeing or hearing. Jung said it was like seeing around corners.

The fourth is **feeling**. Feeling, like thinking, is a matter of evaluating information, this time by weighing one’s overall, emotional response. Jung calls it rational, obviously not in the usual sense of the word.

We all have these functions. We just have them in different proportions, you might say. Each of us has a **superior** function, which we prefer and which is best developed in us, a **secondary** function, which we are aware of and use in support of our superior function, a **tertiary** function, which is only slightly less developed but not terribly conscious, and an **inferior** function, which is poorly developed and so unconscious that we might deny its existence in ourselves.

Most of us develop only one or two of the functions, but our goal should be to develop all four. Once again, Jung sees the transcendence of opposites as the ideal.

**Assessment**
Katharine Briggs and her daughter Isabel Briggs Myers found Jung’s types and functions so revealing of people's personalities that they decided to develop a paper-and-pencil test. It came to be called the **Myers-Briggs Type Indicator**, and is one of the most popular, and most studied, tests around.

On the basis of your answers on about 125 questions, you are placed in one of sixteen types, with the understanding that some people might find themselves somewhere between two or three types. What type you are says quite a bit about you -- your likes and dislikes, your likely career choices, your compatibility with others, and so on. People tend to like it quite a bit. It has the unusual quality among personality tests of not being too judgmental: None of the types is terribly negative, nor are any overly positive. Rather than assessing how "crazy" you are, the "Myers-Briggs" simply opens up your personality for exploration.

The test has four scales. **Extroversion - Introversion** (E-I) is the most important. Test researchers have found that about 75% of the population is extroverted.

The next one is **Sensing - Intuiting** (S-N), with about 75% of the population sensing.

The next is **Thinking - Feeling** (T-F). Although these are distributed evenly through the population, researchers have found that two-thirds of men are thinkers, while two-thirds of women are feelers. This might seem like stereotyping, but keep in mind that feeling and thinking are both valued equally by Jungians, and that one-third of men are feelers and one-third of women are thinkers. Note, though, that society does value thinking and feeling differently, and that feeling men and thinking women often have difficulties dealing with people's stereotyped expectations.

The last is **Judging - Perceiving** (J-P), not one of Jung's original dimensions. Myers and Briggs included this one in order to help determine which of a person's functions is superior. Generally, judging people are more careful, perhaps inhibited, in their lives. Perceiving people tend to be more spontaneous, sometimes careless. If you are an extrovert and a "J," you are a thinker or feeler, whichever is stronger. Extroverted and "P" means you are a senser or intuiter. On the other hand, an introvert with a high "J" score will be a senser or intuiter, while an introvert with a high "P" score will be a thinker or feeler. J and P are equally distributed in the population.

Each type is identified by four letters, such as ENFJ. These have proven so popular, you can even find them on people's license plates!

**ENFJ** (Extroverted feeling with intuiting): These people are easy speakers. They tend to idealize their friends. They make good parents, but have a tendency to allow themselves to be used. They make good therapists, teachers, executives, and salespeople.

**ENFP** (Extroverted intuiting with feeling): These people love novelty and surprises. They are big on emotions and expression. They are susceptible to muscle tension and tend to be
hyperalert. They tend to feel self-conscious. They are good at sales, advertising, politics, and acting.

**ENTJ** (Extroverted thinking with intuiting): In charge at home, they expect a lot from spouses and kids. They like organization and structure and tend to make good executives and administrators.

**ENTP** (Extroverted intuiting with thinking): These are lively people, not humdrum or orderly. As mates, they are a little dangerous, especially economically. They are good at analysis and make good entrepreneurs. They do tend to play at oneupmanship.

**ESFJ** (Extroverted feeling with sensing): These people like harmony. They tend to have strong shoulds and should-nots. They may be dependent, first on parents and later on spouses. They wear their hearts on their sleeves and excel in service occupations involving personal contact.

**ESFP** (Extroverted sensing with feeling): Very generous and impulsive, they have a low tolerance for anxiety. They make good performers, they like public relations, and they love the phone. They should avoid scholarly pursuits, especially science.

**ESTJ** (Extroverted thinking with sensing): These are responsible mates and parents and are loyal to the workplace. They are realistic, down-to-earth, orderly, and love tradition. They often find themselves joining civic clubs!

**ESTP** (Extroverted sensing with thinking): These are action-oriented people, often sophisticated, sometimes ruthless -- our "James Bonds." As mates, they are exciting and charming, but they have trouble with commitment. They make good promoters, entrepreneurs, and con artists.

**INFJ** (Introverted intuiting with feeling): These are serious students and workers who really want to contribute. They are private and easily hurt. They make good spouses, but tend to be physically reserved. People often think they are psychic. They make good therapists, general practitioners, ministers, and so on.

**INFP** (Introverted feeling with intuiting): These people are idealistic, self-sacrificing, and somewhat cool or reserved. They are very family and home oriented, but don't relax well. You find them in psychology, architecture, and religion, but never in business.

**INTJ** (Introverted intuiting with thinking): These are the most independent of all types. They love logic and ideas and are drawn to scientific research. They can be rather single-minded, though.

**INTP** (Introverted thinking with intuiting): Faithful, preoccupied, and forgetful, these are the bookworms. They tend to be very precise in their use of language. They are good at logic and math and make good philosophers and theoretical scientists, but not writers or salespeople.
ISFJ (Introverted sensing with feeling): These people are service and work oriented. They may suffer from fatigue and tend to be attracted to troublemakers. They are good nurses, teachers, secretaries, general practitioners, librarians, middle managers, and housekeepers.

ISFP (Introverted feeling with sensing): They are shy and retiring, are not talkative, but like sensuous action. They like painting, drawing, sculpting, composing, dancing -- the arts generally -- and they like nature. They are not big on commitment.

ISTJ (Introverted sensing with thinking): These are dependable pillars of strength. They often try to reform their mates and other people. They make good bank examiners, auditors, accountants, tax examiners, supervisors in libraries and hospitals, business, home ec., and phys. ed. teachers, and boy or girl scouts!

ISTP (Introverted thinking with sensing): These people are action-oriented and fearless, and crave excitement. They are impulsive and dangerous to stop. They often like tools, instruments, and weapons, and often become technical experts. They are not interested in communications and are often incorrectly diagnosed as dyslexic or hyperactive. They tend to do badly in school.

Even without taking the test, you may very well recognize yourself in one or two of these types. Or ask others -- they may be more accurate!
Social Psychological/Interpersonal Approach to Personality

Alfred Adler

Alfred Adler (February 7, 1870 – May 28, 1937) was an Austrian medical doctor, psychotherapist, and founder of the school of individual psychology. In collaboration with Sigmund Freud and a small group of Freud's colleagues, Adler was among the co-founders of the psychoanalytic movement as a core member of the Vienna Psychoanalytic Society. He was the first major figure to break away from psychoanalysis to form an independent school of psychotherapy and personality theory. This was after Freud declared Adler's ideas as too contrary, leading to an ultimatum to all members of the Society (which Freud had shepherded) to drop Adler or be expelled, disavowing the right to dissent (Makari, 2008). Following this split, Adler would come to have an enormous, independent effect on the disciplines of counseling and psychotherapy as they developed over the course of the 20th century (Ellenberger, 1970). He influenced notable figures in subsequent schools of psychotherapy such as Rollo May, Viktor Frankl, Abraham Maslow and Albert Ellis. His writings preceded, and were at times surprisingly consistent with, later neo-Freudian insights such as those evidenced in the works of Karen Horney, Harry Stack Sullivan and Erich Fromm.
Adler emphasized the importance of equality in preventing various forms of psychopathology, and espoused the development of social interest and democratic family structures for raising children. His most famous concept is the inferiority complex which speaks to the problem of self-esteem and its negative effects on human health (e.g. sometimes producing a paradoxical superiority striving). His emphasis on power dynamics is rooted in the philosophy of Nietzsche, whose works were published a few decades before Adler's. However, Adler's conceptualization of the "Will to Power" focuses on the individual's creative power to change for the better. Adler argued for holism, viewing the individual holistically rather than reductively, the latter being the dominant lens for viewing human psychology. Adler was also among the first in psychology to argue in favor of feminism making the case that power dynamics between men and women (and associations with masculinity and femininity) are crucial to understanding human psychology (Connell, 1995). Adler is considered, along with Freud and Jung, to be one of the three founding figures of depth psychology, which emphasizes the unconscious and psychodynamics (Ellenberger, 1970; Ehrenwald, 1991).

**Basic principles**

Adler was influenced by the mental construct ideas of the philosopher Hans Vaihinger (The Philosophy of As If / Philosophie des Als Ob) and the literature of Dostoevsky. While still a member of the Vienna Psychoanalytic Society he developed a theory of organic inferiority and compensation that was the prototype for his later turn to phenomenology and the development of his famous concept, the inferiority complex.

Adler was also influenced by the philosophies of Immanuel Kant, Friedrich Nietzsche, Rudolf Virchow and the statesman Jan Smuts (who coined the term "holism"). Adler's School, known as "Individual Psychology"—an arcane reference to the Latin indivisibility meaning indivisibility, a term intended to emphasize holism—is both a social and community psychology as well as a depth psychology. Adler was an early advocate in psychology for prevention and emphasized the training of parents, teachers, social workers and so on in democratic approaches that allow a child to exercise their power through reasoned decision making whilst co-operating with others. He was a social idealist, and was known as a socialist in his early years of association with psychoanalysis (1902–1911). His allegiance to Marxism dissipated over time (he retained Marx's social idealism yet distanced himself from Marx's economic theories).

Adler was a very pragmatic man and believed that lay people could make practical use of the insights of psychology. He sought to construct a social movement united under the principles of "Gemeinschaftsgefühl" (community feeling) and social interest (the practical actions that are exercised for the social good). Adler was also an early supporter of feminism in psychology and the social world, believing that feelings of superiority and inferiority were often gendered and expressed symptomatically in characteristic masculine and feminine styles. These styles could form the basis of psychic compensation and lead to mental health difficulties. Adler also spoke of "safeguarding tendencies" and neurotic behavior long before Anna Freud wrote about the same phenomena in her book The Ego and the Mechanisms of Defense.
Adlerian-based scholarly, clinical and social practices focus on the following topics:

- Mental Health Prevention
- Social Interest and Community Feeling
- Holism and the Creative Self
- Fictional Finalism, Teleology, and Goal constructs
- Psychological and Social Encouragement
- Inferiority, Superiority and Compensation
- Life Style / Style of Life
- Early Recollections (a projective technique)
- Family Constellation and Birth Order
- Life Tasks & Social Embeddedness
- The Conscious and Unconscious realms
- Private Logic & Common Sense (based in part on Kant's "sensus communis")
- Symptoms and Neurosis
- Safeguarding Behaviour
- Guilt and Guilt Feelings
- Socratic Questioning
- Dream Interpretation
- Child and Adolescent Psychology
- Democratic approaches to Parenting and Families
- Adlerian Approaches to Classroom Management
- Leadership and Organisational Psychology

From its inception, Adlerian psychology has always included both professional and lay adherents. Indeed, Adler felt that all people could make use of the scientific insights garnered by psychology and he welcomed everyone, from decorated academics to those with no formal education to participate in spreading the principles of Adlerian psychology.

**Adler's approach to personality**

Adler's book, Über den nervösen Charakter (The Neurotic Character) defines his earlier key ideas. He argued that human personality could be explained teleologically, parts of the individual's unconscious self ideal work to convert feelings of inferiority to superiority (or rather completeness). The desires of the self ideal were countered by social and ethical demands. If the corrective factors were disregarded and the individual over-compensated, then an inferiority complex would occur, fostering the danger of the individual becoming egocentric, power-hungry and aggressive or worse. Common therapeutic tools include the use of humor, historical instances, and paradoxical injunctions.

**Psychodynamics and teleology**

Adler maintained that human psychology is psychodynamic in nature, yet unlike Freud's metapsychology that emphasizes instinctual demands, human psychology is guided by goals and fueled by a yet unknown creative force. Like Freud's instincts, Adler's fictive
goals are largely unconscious. These goals have a "teleological" function. Constructivist Adlerians, influenced by neo-Kantian and Nietzschean ideas, view these "teleological" goals as "fictions" in the sense that Hans Vaihinger spoke of (fictio). Usually there is a fictional final goal which can be deciphered alongside of innumerable sub-goals. The inferiority/superiority dynamic is constantly at work through various forms of compensation and over-compensation. For example, in anorexia nervosa the fictive final goal is to "be perfectly thin" (overcompensation on the basis of a feeling of inferiority). Hence, the fictive final goal can serve a persecutory function that is ever-present in subjectivity (though its trace springs are usually unconscious). The end goal of being "thin" is fictive however since it can never be subjectively achieved.

Teleology serves another vital function for Adlerians. Chilon's "hora telos" ("see the end, consider the consequences") provides for both healthy and maladaptive psychodynamics. Here we also find Adler's emphasis on personal responsibility in mentally healthy subjects who seek their own and the social good (Slavik & King 2007).

Constructivism and metaphysics

The metaphysical thread of Adlerian theory does not problematise the notion of teleology since concepts such as eternity (an ungraspable end where time ceases to exist) match the religious aspects that are held in tandem. In contrast, the constructivist Adlerian threads (either humanist/modernist or postmodern in variant) seek to raise insight of the force of unconscious fictions— which carry all of the inevitability of 'fate'— so long as one does not understand them. Here, 'teleology' itself is fictive yet experienced as quite real. This aspect of Adler's theory is somewhat analogous to the principles developed in Rational Emotive Behavior Therapy (REBT) and Cognitive Therapy (CT). Both Albert Ellis and Aaron T. Beck credit Adler as a major precursor to REBT and CT. Ellis in particular was a member of the North American Society for Adlerian Psychology and served as an editorial board member for the Adlerian Journal Individual Psychology.

As a psychodynamic system, Adlerians excavate the past of a client/patient in order to alter their future and increase integration into community in the 'here-and-now'. The 'here-and-now' aspects are especially relevant to those Adlerians who emphasize humanism and/or existentialism in their approaches. It also changes the way of how we look at life.

Holism

Metaphysical Adlerians emphasise a spiritual holism in keeping with what Jan Smuts articulated (Smuts coined the term "holism"), that is, the spiritual sense of one-ness that holism usually implies (etymology of holism: from ἁλός holos, a Greek word meaning all, entire, total) Smuts believed that evolution involves a progressive series of lesser wholes integrating into larger ones. Whilst Smuts' text Holism and Evolution is thought to be a work of science, it actually attempts to unify evolution with a higher metaphysical principle (holism). The sense of connection and one-ness revered in various religious traditions (among these, Baha'i, Christianity, Judaism, Islam and Buddhism) finds a strong complement in Adler's thought.
The pragmatic and materialist aspects to contextualizing members of communities, the construction of communities and the socio-historical-political forces that shape communities matter a great deal when it comes to understanding an individual's psychological make-up and functioning. This aspect of Adlerian psychology holds a high level of synergy with the field of community psychology. However, Adlerian psychology, unlike community psychology, is holistically concerned with both prevention and clinical treatment after-the-fact. Hence, Adler cannot be considered the "first community psychologist", a discourse that formalized in the decades following Adler's death (King & Shelley, 2008).

Adlerian psychology, Carl Jung's Analytical Psychology, Gestalt Therapy and Karen Horney's psychodynamic approach are holistic schools of psychology. These discourses eschew a reductive approach to understanding human psychology and psychopathology.

**Typology**

Adler (1956) developed a scheme of so-called personality types. These 'types' are to be taken as provisional or heuristic since he did not, in essence, believe in personality types. The danger with typology is to lose sight of the individual's uniqueness and to gaze reductively, acts that Adler opposed. Nevertheless, he intended to illustrate patterns that could denote a characteristic governed under the overall style of life. Hence American Adlerians such as Harold Mosak have made use of Adler's typology in this provisional sense:

- **The Getting or Leaning type** are those who selfishly take without giving back. These people also tend to be antisocial and have low activity levels.

- **The Avoiding types** are those that hate being defeated. They may be successful, but have not taken any risks getting there. They are likely to have low social contact in fear of rejection or defeat in any way.

- **The Ruling or Dominant type** strive for power and are willing to manipulate situations and people, anything to get their way. People of this type are also prone to anti-social behavior.

- **The Socially Useful types** are those who are very outgoing and very active. They have a lot of social contact and strive to make changes for the good.

These 'types' are typically formed in childhood and are expressions of the Style of Life.

**On birth order**

Adler often emphasized one's birth order as having an influence on the Style of Life and the strengths and weaknesses in one's psychological make-up. Birth Order referred to the placement of siblings within the family. Adler believed that the firstborn child would be
loved and nurtured by the family until the arrival of a second child. This second child would cause the first born to suffer feelings of dethronement, no longer being the center of attention. Adler (1908) believed that in a three-child family, the oldest child would be the most likely to suffer from neuroticism and substance addiction which he reasoned was a compensation for the feelings of excessive responsibility "the weight of the world on one's shoulders" (e.g. having to look after the younger ones) and the melancholic loss of that once supremely pampered position. As a result, he predicted that this child was the most likely to end up in jail or an asylum. Youngest children would tend to be overindulged, leading to poor social empathy. Consequently, the middle child, who would experience neither dethronement nor overindulgence, was most likely to develop into a successful individual yet also most likely to be a rebel and to feel squeezed-out. Adler himself was the second in a family of six children.

Adler never produced any scientific support for his interpretations on birth order roles. Yet the value of the hypothesis was to extend the importance of siblings in marking the psychology of the individual beyond Freud's more limited emphasis on the Mother and Father. Hence, Adlerians spend time therapeutically mapping the influence that siblings (or lack thereof) had on the psychology of their clients. The idiographic approach entails an excavation of the phenomenology of one's birth order position for likely influence on the subject's Style of Life. In sum, the subjective experiences of sibling positionality and inter-relations are psychodynamically important for Adlerian therapists and personality theorists, not the cookbook predictions that may or may not have been objectively true in Adler's time.

On homosexuality

Adler's ideas regarding non-heterosexual sexuality and various social forms of deviance have long been controversial. Along with prostitution and criminality, Adler had classified 'homosexuals' as falling among the "failures of life". In 1917, he began his writings on homosexuality with a 52-page brochure, and sporadically published more thoughts throughout the rest of his life.

The Dutch psychiatrist Gerard J. M. van den Aardweg underlines how Alfred Adler came to his conclusions for, in 1917, Adler believed that he had established a connection between homosexuality and an inferiority complex towards one's own gender. This point of view differed from Freud's theory that homosexuality is rooted in narcissism or Jung's view of inappropriate expressions of contrasexuality vis-à-vis the archetypes of the Anima and Animus.

There is evidence that Adler may have moved towards abandoning the hypothesis. Towards the end of Adler's life in the mid 1930s, his opinion towards homosexuality began to shift. Elizabeth H. McDowell, a New York state family social worker recalls undertaking supervision with Adler on a young man who was "living in sin" with an older man in New York City. Adler asked her, "Is he happy, would you say?" "Oh yes," McDowell replied. Adler then stated, "Well, why don't we leave him alone." On reflection, McDowell found this comment to contain "profound wisdom", but there must be some misunderstanding on
Adler’s answer. Adler was offering his help only to those who were asking for it in person. His therapy process could be applied only to those who felt themselves in a deadlock, fallen "at the bottom of a well”, and looking for help to get out. Homosexuality was considered one of the most difficult cases, needing long experience on the part of the psychotherapist and many consequent sessions and much personal work by the individual, depending on the "maturity" of the problem. Success could not be guaranteed.

According to Phyllis Bottome, who wrote Adler’s Biography (after Adler himself laid upon her that task): "Homosexuality he always treated as lack of courage. These were but ways of obtaining a slight release for a physical need while avoiding a greater obligation. A transient partner of your own sex is a better known road and requires less courage than a permanent contact with an "unknown" sex. [...] Adler taught that men cannot be judged from within by their "possessions," as he used to call nerves, glands, traumas, drives et cetera, since both judge and prisoner are liable to misconstrue what is invisible and incalculable; but that he can be judged, with no danger from introspection, by how he measures up to the three common life tasks set before every human being between the cradle and the grave. Work or employment, love or marriage, social contact."

**Parent education**

Adler emphasized both treatment and prevention. As a psychodynamic psychology, Adlerians emphasize the foundational importance of childhood in developing personality and any tendency towards various forms of psychopathology. The best way to inoculate against what are now termed "personality disorders" (what Adler had called the "neurotic character"), or a tendency to various neurotic conditions (depression, anxiety, etc.), is to train a child to be and feel an equal part of the family. This entails developing a democratic character and the ability to exercise power reasonably rather than through compensation. Hence Adler proselytized against corporal punishment and cautioned parents to refrain from the twin evils of pampering and neglect. The responsibility to the optimal development of the child is not limited to the Mother or Father but to teachers and society more broadly. Adler argued therefore that teachers, nurses, social workers, and so on require training in parent education in order to complement the work of the family in fostering a democratic character. When a child does not feel equal and is enacted upon (abused through pampering or neglect) they are likely to develop inferiority or superiority complexes and various accompanying compensation strategies. These strategies exact a social toll by seeding higher divorce rates, the breakdown of the family, criminal tendencies, and subjective suffering in the various guises of psychopathology. Adlerians have long promoted parent education groups, especially those influenced by the famous Austrian/American Adlerian Rudolf Dreikurs (Dreikurs & Soltz, 1964).

**Spirituality, ecology and community**

In a late work, Social Interest: A Challenge to Mankind(1938), Adler turns to the subject of metaphysics, where he integrates Jan Smuts' evolutionary holism with the ideas of teleology and community: "sub specie aeternitatis". Unabashedly, he argues his vision of society: "Social feeling means above all a struggle for a communal form that must be
thought of as eternally applicable... when humanity has attained its goal of perfection... an ideal society amongst all mankind, the ultimate fulfillment of evolution." Adler follows this pronouncement with a defense of metaphysics:

"I see no reason to be afraid of metaphysics; it has had a great influence on human life and development. We are not blessed with the possession of absolute truth; on that account we are compelled to form theories for ourselves about our future, about the results of our actions, etc. Our idea of social feeling as the final form of humanity - of an imagined state in which all the problems of life are solved and all our relations to the external world rightly adjusted - is a regulative ideal, a goal that gives our direction. This goal of perfection must bear within it the goal of an ideal community, because all that we value in life, all that endures and continues to endure, is eternally the product of this social feeling."

This social feeling for Adler is Gemeinschaftsgefühl, a community feeling whereby one feels he or she belongs with others and has also developed an ecological connection with nature (plants, animals, the crust of this earth) and the cosmos as a whole, sub specie aeternitatis. Clearly, Adler himself had little problem with adopting a metaphysical and spiritual point of view to support his theories. Yet his overall theoretical yield provides ample room for the dialectical humanist (modernist) and separately the postmodernist to explain the significance of community and ecology through differing lenses (even if Adlerians have not fully considered how deeply divisive and contradictory these three threads of metaphysics, modernism, and post modernism are).

**Individual psychology**

Individual psychology is a term used specifically to refer to the psychological method or science founded by the Viennese psychiatrist Alfred Adler (Fall, Holden, & Marquis, 2002). The English edition of Adler’s work on the subject (1925) is a collection of papers and lectures given mainly in 1912-1914, and covers the whole range of human psychology in a single survey, intended to mirror the indivisible unity of the personality.

The concept of "individual psychology" was formulated in the process in which Adler broke away from the psychoanalytic school of Sigmund Freud (Dinkmeyer, Pew, & Dinkmeyer, 1979). In this development, Adler did call his work "free psychoanalysis" for a time, but he later rejected the label of "psychoanalyst" (Hoffman, 1994). His method, involving a holistic approach to the study of character (Mosak & DiPietro, 2006), has been extremely influential in later 20th century counselling and psychiatric strategies (Oberst & Stewart, 2003).

The term "individual psychology" can also be used more generally to refer to what is more commonly known as differential psychology, or the psychology of individual differences. Usage of this term is likely to imply a more individualistic focus than is found in mainstream psychology of individual differences, where there is frequently a bias towards nomothetic research.
The term differentiates Adler’s approach entirely from Völkerpsychologie (Social psychology), the culminating thesis of Wilhelm Wundt down to 1920.

**Adler's psychology**

Adler shifted the grounds of psychological determinance from sex and libido, the Freudian standpoint, to environmental factors. He gave special prominence to societal factors. According to him a person has to combat or confront three forces: societal, love-related, and vocational forces. These confrontations determine the final nature of a personality. Adler based his theories on the pre-adulthood development of a person. He laid stress on such areas as hated children, physical deformities at birth, birth order, etc.

Adlerian psychology shows parallels with the humanistic psychology of Abraham Maslow, who acknowledged Adler's influence on his own theories. Both individual psychology and humanistic psychology hold that the individual human being is the best determinant of his or her own needs, desires, interests, and growth.

**The theory of compensation, defeat and over-compensation**

According to Adler, an individual derives his personality traits from these essentially external factors. The character of the individual is formed by his responses to their influence in the following ways:

**Compensation**

Whenever a person suffers from any disadvantages that make him or her inferior to others, his or her main aim becomes to bring those disadvantages to an end. Those who are able to do this become successful in their lives on both social as well as individual bases.

**Resignation**

There are those who give in to their disadvantages and become reconciled to them. Such people are in the majority. The attitude of the world towards them is of a cool, rather uninterested sympathy.

**Over-compensation**

There are some persons who become so infatuated with the idea of compensating for their disadvantages that they end up over-indulging in the pursuit. These are the neurotics.

Thus, the external factors are vital in character formation.

Adler’s views are not only refreshing but are now an indispensable part of all psychiatric treatments and therapies. Examples of psychologists and therapists who could be called "individual psychologists" in the sense of being Adlerian include Rudolf Dreikurs and Henry Stein.
Classical Adlerian psychology

Classical Adlerian psychology is a values-based, fully integrated theory of personality, model of psychopathology, philosophy of living, strategy for preventative education, and technique of psychotherapy. Its mission is to encourage the development of psychologically healthy and cooperative individuals, couples, and families in order to effectively pursue the ideals of social equality and democratic living. A vigorously optimistic and inspiring approach to psychotherapy, it balances the equally important needs for optimal development of the individual as well as social responsibility.

With a solid foundation in the original teachings and therapeutic style of Alfred Adler, it integrates several resources: the contributions of Kurt Adler, Alexander Müller, Lydia Sichler, Sophia de Vries, and Anthony Bruck; the self-actualization research of Abraham Maslow; and the creative innovations of Henry Stein.

Theory of personality

Primary and secondary feelings of inferiority

The primary feeling of inferiority is the original and normal feeling in the infant and child of smallness, weakness, and dependency. This usually acts as an incentive for development. However, a child may develop an exaggerated feeling of inferiority as a result of physiological difficulties or handicaps, inappropriate parenting (including abuse, neglect, over-pampering), or cultural and/or economic obstacles. The secondary inferiority feeling is the adult's feeling of insufficiency that results from having adopted an unrealistically high or impossible compensatory goal, often one of perfection. The degree of distress is proportional to the subjective or felt distance from that goal. In addition to this distress, the residue of the original, primary feeling of inferiority may still haunt an adult. An inferiority complex is an extreme expectation that one will fail in the tasks of life that can lead to pessimistic resignation and an assumed inability to overcome difficulties.

Striving for significance

The basic, common movement of every human being is, from birth until death, of overcoming, expansion, growth, completion, and security. This may take a negative turn into a striving for superiority or power over other people. Unfortunately, many reference works mistakenly refer only to the negative "striving for power" as Adler's basic premise.

Compensation

A tendency to make up for under-development of physical or mental functioning through interest and training, usually within a relatively normal range of development. Over-compensation reflects a more powerful impulse to gain an extra margin of development, frequently beyond the normal range. This may take a useful direction toward exceptional
achievement, or a useless direction toward excessive perfectionism. Genius may result from extraordinary over-compensation. Under-compensation reflects a less active, even passive attitude toward development that usually places excessive expectations and demands on other people.

**Feeling of community**

Translated variably from the German, Gemeinschaftsgefühl can mean community feeling, social interest, social feeling or social sense. The concept denotes a recognition and acceptance of the interconnectedness of all people, experienced on affective, cognitive, and behavioral levels. At the affective level, it is experienced as a deep feeling of belonging to the human race and empathy with fellow men and women. At the cognitive level, it is experienced as a recognition of interdependence with others, i.e., that the welfare of any one individual ultimately depends on the welfare of everyone. At the behavioral level, these thoughts and feelings can then be translated into actions aimed at self-development as well as cooperative and helpful movements directed toward others. Thus, at its heart the concept of "feeling of community" encompasses individuals' full development of their capacities, a process that is both personally fulfilling and results in people who have something worthwhile to contribute to one another.

**Style of life**

A concept reflecting the organization of the personality, including the meaning individuals give to the world and to themselves, their fictional final goal, and the affective, cognitive, and behavioral strategies they employ to reach the goal. This style is also viewed in the context of the individual’s approach to or avoidance of the four tasks of life: other people, work, love and sex.

**Fictional final goal**

Classical Adlerian Psychology assumes a central personality dynamic reflecting the growth and forward movement of life. It is a future-oriented striving toward an ideal goal of significance, superiority, success or completion. The early childhood feeling of inferiority, for which one aims to compensate, leads to the creation of a fictional final goal which subjectively seems to promise total relief from the feeling of inferiority, future security, and success. The depth of the inferior feeling usually determines the height of the goal which then becomes the "final cause" of behavior patterns.

**Unity of the personality**

The position that all of the cognitive, affective, and behavioral facets of the individual are viewed as components of an integrated whole, moving in one psychological direction, without internal contradictions or conflicts.

**Private logic (vs. common sense)**
Private logic is the reasoning invented by an individual to stimulate and justify a style of life. By contrast, common sense represents society's cumulative, consensual reasoning that recognizes the wisdom of mutual benefit.

**Safeguarding tendency**

Cognitive and behavioral strategies used to avoid or excuse oneself from imagined failure. They can take the form of symptoms—such as anxiety, phobias, or depression—which can all be used as excuses for avoiding the tasks of life and transferring responsibility to others. They can also take the form of aggression or withdrawal. Aggressive safeguarding strategies include depreciation, accusations, or self-accusations and guilt, which are used as means for elevating a fragile self-esteem and safeguarding an overblown, idealized image of oneself. Withdrawal takes various forms of physical, mental, and emotional distancing from seemingly threatening people and problems.

**Psychology of use (vs. possession)**

The perspective that an individual uses his thinking, feeling, and actions (even his symptoms) to achieve a social end. He does not merely inherit or possess certain qualities, traits, or attitudes, but adopts only those characteristics that serve his goal, and rejects those that do not fit his intentions. This assumption emphasizes personal responsibility for one's character.

**Inferiority complex**

An inferiority complex, in the fields of psychology and psychoanalysis, is a feeling that one is inferior to others in some way. Such feelings can arise from an imagined or actual inferiority in the afflicted person. It is often subconscious, and is thought to drive afflicted individuals to overcompensate, resulting either in spectacular achievement or extreme schizotypal behavior, or both. Unlike a normal feeling of inferiority, which can act as an incentive for achievement (or promote discouragement), an inferiority complex is an advanced state of discouragement, often embedding itself into one's lifestyle, and sometimes resulting in a retreat from difficulties.

**Classifications**

Classical Adlerian psychology makes a distinction between primary and secondary inferiority feelings. A primary inferiority feeling is said to be rooted in the young child's original experience of weakness, helplessness and dependency. It can then be intensified by comparisons to siblings and adults. A secondary inferiority feeling relates to an adult's experience of being unable to reach an unconscious, fictional final goal of subjective security and success to compensate for the inferiority feelings. The perceived distance from that goal would lead to a negative/depressed feeling that could then prompt the recall of the original inferiority feeling; this composite of inferiority feelings could be experienced as overwhelming. The goal invented to relieve the original, primary feeling of inferiority
which actually causes the secondary feeling of inferiority is the "catch-22" of this dilemma. This vicious circle is common in neurotic lifestyles.

A feeling that you are not as good, as important or as intelligent as other people generally use with Psychology Science. In 1912, a psychologist by the name of Alfred Adler wrote a book titled The Neurotic Character. His research in this book founded a popular area of psychology known as the inferiority complex which is a term used to describe a sense of inferiority an individual feels about oneself towards other people. It revolves around social status, power, ego, and dominance. You will have an inferiority complex when you feel inferior and think that other people are better than you. An inferiority complex can arise when you experience an imagined or conditioned feeling of inferiority. As is the case for most people, it is a combination of imagination and subtle conditioning. You would feel inferior when an event takes place which makes you feel less than others (conditioning aspect) and your creative imagination (imagination aspect) would “blow out” your understanding of the event beyond what would seem reasonable to another person.

Causes

- Parental attitudes and upbringing – disapproving, negative remarks and evaluations of behavior emphasizing mistakes and shortcomings determine the attitude of the child before the age of six.
- Physical defects – such as disproportional facial and body features, weight, height, strength, speech defects and defective vision cause inferiority complexes.
- Mental limitations – cause feelings of inferiority when unfavorable comparisons are made with the superior achievements of others, and when satisfactory performance is expected.
- Social disadvantages and discriminations – family, alleged race, sex, sexual orientation, economic status, or religion.

Superiority complex

Superiority complex refers to an exaggerated feeling of being superior to others.

Background and Adler's childhood

The term was coined by Alfred Adler (February 7, 1870 – May 28, 1937), as part of his School of Individual psychology. It was introduced in his series of books, including "Understanding Human Nature" and "Social Interest".

Adler’s childhood may shed significant light on how his theory of the superiority complex came about. Overcoming his personal feeling of inferiority, Adler was able to direct and shape his own unique destiny. Alfred Adler was a sickly child with striving, healthy siblings. Adler thought himself “ugly and too small” and was in constant competition with his older brother. Pampered by his mother because of his sickness, Adler was dethroned when his
mother’s affections turned to his younger brother. Feeling abandoned by his mother, Adler sought solace from his father—who had very high expectations of Alfred.

Despite Adler’s childhood adversities (which included being hit by a car twice) through determination and very hard work he graduated from college and became a doctor. He then went on to study with Freud, becoming the president of the Vienna Psychoanalytical Society. Madly driven and highly motivated, Adler defected from Freud and founded the Society for Free Psychoanalytic Research, taking near a third of Freud’s followers with him.

Adler moved to New York in 1929, and with his warmth, intense drive and optimism, became America’s first popular psychologist. A historical view of Adler’s superiority complex sheds light on how his childhood situation shaped his theories on the subject, using himself as a subject of study.

**Adler and striving for superiority**

Adler’s view of striving for superiority is the urge for people to strive toward perfection. Adler described his notion of striving for superiority as the fundamental fact of life. He feels that everyone has a driven force to succeed and overcome imperfections. Adler believes that everyone experiences feelings of inferiority. These inferiorities start early on in our lives as small, weak and powerless children that are surrounded by larger and powerful adults. These feelings of inferiority occur from our personal limitations and may result in our struggle for superiority. According to Adler, the core of each person’s style of life or (personality pattern), “the pattern of personality and behavior that defines the pathway each person takes through life”, is formed by the age of 5. Striving for superiority is not an attempt to be better than everyone else, nor is it an arrogant or domineering tendency or an inflated opinion of our abilities and accomplishments. What Adler meant was a drive for perfection (See Perfection). Thus, Adler suggested that we strive for superiority in an effort to perfect ourselves, to make ourselves complete or whole.

Later on in life, Adler began to emphasize the existence of a creative self. He meant that humans create their own personalities through choices and experiences.

**Adlerian definition**

"We should not be astonished if in the cases where we see an inferiority [feeling] complex we find a superiority complex more or less hidden. On the other hand, if we inquire into a superiority complex and study its continuity, we can always find a more or less hidden inferiority [feeling] complex."

"If a person is a show-off it is only because he feels inferior, because he does not feel strong enough to compete with others on the useful side of life. That is why he stays on the useless side. He is not in harmony with society. It seems to be a trait of human nature that when individuals - both children and adults - feel weak, they want to solve the problems of life in such a way as to obtain personal superiority without any admixture of social interest. A
superiority complex is a second phase. It is a compensation for the inferiority [feeling] complex."

"The superiority complex is one of the ways which a person with an inferiority [feeling] complex may use as a method of escape from his difficulties. He assumes that he is superior when he is not, and this false success compensates him for the state of inferiority which he cannot bear. The normal person does not have a superiority complex, he does not even have a sense of superiority. He has the striving to be superior in the sense that we all have ambition to be successful; but so long as this striving is expressed in work it does not lead to false valuations, which are at the root of mental disease."

**Other perspectives**

Other authors have argued that it is a mistake to believe that both the superiority and inferiority complex can be found together as different expressions of the same pathology and that both complexes can exist within the same individual since an individual with a superiority complex truly believes they are superior to others. An inferiority complex may manifest with the behaviors that are intended to show others that one is superior; such as expensive material possessions, or an obsession with vanity and appearances. They express themselves as superior because they lack feelings of adequacy. Superiority complex sufferers do not care about image or vanity, they have innate feelings of superiority and thus do not concern themselves with proving their superiority to others. The term "superiority complex", in everyday usage, refers to an overly high opinion of oneself. In psychology, it refers to the unrealistic and exaggerated belief that one is better than others. In contrast, inferiority complex sufferers mimic this as a way to compensate for unconscious feelings of low self-esteem or inadequacy.

Those exhibiting the superiority complex have a self-image of supremacy. Those with superiority complexes may garner a negative image in those around them, as they are not concerned with the opinions of others about themselves. This is responsible for the paradox in which those with an inferiority complex are the ones who present themselves in the best light possible; while those with a superiority complex may not attempt to make themselves look good. This may give off an image that others may consider inferior. This is responsible for the misconception that those with an inferiority complex are meek and mild, but the complex is not defined by the behavior of the individual but by the self-image of the individual. Not that a person with a superiority complex will not express their superiority to others, only that they do not feel the need to do so. They may speak as if they are all-knowing and better than others. But ultimately they do not care if others think so or not, and will not care if others tell them so. They simply won't listen to, and don't care about, those who disagree. In this regard, it is much alike the cognitive bias known as illusory superiority. This is juxtaposed to an inferiority complex where if their knowledge, accuracy, superiority or etc. is challenged, the individual will not stop in their attempts to prove such things until the dissenting party accepts their opinion (or whatever issue it may be). Again this is another reason that those with inferiority complexes are often mistaken for having superiority complexes when they must express and maintain their superiority in the eyes of others. Many fail to recognize that this is a trait of low self-opinion who care
deeply about the opinion of others, not of those who feel superior and have high-self esteem and do not care at all about the opinion of others.

Behaviors related to this in a superiority complex may include an exaggerated opinion of one's worth and abilities, unrealistically high expectations in goals and achievements for oneself and others, persistent attempts to correct others (regardless of whether or not they are actually correct), a tendency to discredit others' opinions and over-forcefulness aimed at dominating those considered as weaker or less important. While behaviors related to this in an inferiority complex may include exaggeration of one's worth and abilities to others, vanity, extravagant dressing (intent on drawing attention), excessive need for competition, pride, over-sentimentality and affected exaltation, snobbishness, a tendency to discredit others' opinions and over-forcefulness aimed at dominating those who threaten their image of superiority. In both cases the conscious awareness of one's delusion typically results in a temporal phenomenon called cognitive dissonance, which may or may not serve the purpose of bringing that person back "down to earth".

**Adler: Will to Power**

Alfred Adler borrowed heavily from Nietzsche's work to develop his second Viennese school of psychotherapy called individual psychology. Adler (1912) wrote in his important book Über den nervösen Charakter (The Neurotic Constitution):

Nietzsche's "Will to power" and "Will to seem" embrace many of our views, which again resemble in some respects the views of Fére and the older writers, according to whom the sensation of pleasure originates in a feeling of power, that of pain in a feeling of feebleness (Ohnmacht).

Adler's adaptation of the will to power was and still is in contrast to Sigmund Freud's pleasure principle or the "will to pleasure", and to Viktor Frankl's logotherapy or the "will to meaning". Adler's intent was to build a movement that would rival, even supplant, others in psychology by arguing for the holistic integrity of psychological well-being with that of social equality. His interpretation of Nietzsche's will to power was concerned with the individual patient's overcoming of the superiority-inferiority dynamic.

In Man's Search for Meaning, Frankl compared his third Viennese school of psychotherapy with Adler's psychoanalytic interpretation of the will to power:

... the striving to find a meaning in one’s life is the primary motivational force in man. That is why I speak of a will to meaning in contrast to the pleasure principle (or, as we could also term it, the will to pleasure) on which Freudian psychoanalysis is centered, as well as in contrast to the will to power stressed by Adlerian psychology.

—Viktor E. Frankl, M.D., Ph.D.
Birth order

Birth order can affect human psychology, though many supposedly formative effects of birth order are instead related to other factors.

Birth order is defined as a person’s rank by age among his or her siblings. Birth order is often believed to have a profound and lasting effect on psychological development. This assertion has been repeatedly challenged by researchers, yet birth order continues to have a strong presence in pop psychology and popular culture.

Theories

Alfred Adler (1870-1937), an Austrian psychiatrist, and a contemporary of Sigmund Freud and Carl Jung, was one of the first theorists to suggest that birth order influences personality. He argued that birth order can leave an indelible impression on an individual’s style of life, which is one’s habitual way of dealing with the tasks of friendship, love, and work. According to Adler, firstborns are "dethroned" when a second child comes along, and this may have a lasting influence on them. Younger and only children may be pampered and spoiled, which can also affect their later personalities. Additional birth order factors that should be considered are the spacing in years between siblings, the total number of children, and the changing circumstances of the parents over time.

Since Adler’s time, the influence of birth order on the development of personality has become a controversial issue in psychology. Among the general public, it is widely believed that personality is strongly influenced by birth order, but many psychologists dispute this. One important modern theory of personality states that the Big Five personality traits of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism represent most of the important elements of personality that can be measured. Contemporary approaches to birth order frequently suggest that birth order influences these five traits.

In his book Born to Rebel, Frank Sulloway suggests that birth order has strong and consistent effects on the Big Five personality traits. He argues that firstborns are more conscientious, more socially dominant, less agreeable, and less open to new ideas compared to laterborns. However, critics such as Fred Townsend, Toni Falbo, and Judith Rich Harris, argue against Sulloway's theories. An issue of Politics and the Life Sciences, dated September, 2000 but not published until 2004 due to legal threats from Sulloway (who claimed its content to be defamatory, although it was carefully and rigorously researched and sourced) contains criticisms of Sulloway’s theories, including studies that show conflicting findings.

In their book Sibling Relationships: Their Nature and Significance across the Lifespan, Michael E. Lamb and Brian Sutton-Smith make the point that sibling relationships often last an entire lifetime. They point out that the lifespan view proposes that development is
continuous, with individuals continually adjusting to the competing demands of socialization agents and biological tendencies. Thus, even those concerned only with interactions among young siblings implicitly or explicitly acknowledge that all relationships change over time and that any effects of birth order may be eliminated, reinforced, or altered by later experiences.

**Personality**

Claims about birth order effects on personality have received only mixed support in scientific research. Such research is a challenge because of the difficulty of controlling all the variables that are statistically related to birth order. Family size, and a number of social and demographic variables are associated with birth order and serve as potential confounds. For example, large families are generally lower in socioeconomic status than small families. Hence third born children are not only third in birth order, but they are also more likely to come from larger, poorer families than firstborn children. If third-borns have a particular trait, it may be due to birth order, or it may be due to family size, or to any number of other variables. Consequently, there are a large number of published studies on birth order that vary widely in quality and are inconsistent in their conclusions.

Literature reviews that have examined many studies and attempted to control for confounding variables tend to find minimal effects for birth order. Ernst and Angst reviewed all of the research published between 1946 and 1980. They also did their own study on a representative sample of 6,315 young men from Switzerland. They found no substantial effects of birth order and concluded that birth order research was a "waste of time." More recent research analyzed data from a national sample of 9,664 subjects on the Big Five personality traits of extraversion, neuroticism, agreeableness, conscientiousness, and openness to experience. Contrary to Sulloway's predictions, they found no significant correlation between birth order and self-reported personality. There was, however, some tendency for people to perceive birth order effects when they were aware of the birth order of an individual.

Other studies have supported Sulloway's claims about birth order. Paulhus and his colleagues found consistent support in self-reports by both student and adult samples. First borns scored higher on conservatism, conscientiousness and achievement orientation. Later borns scored higher on rebelliousness, openness, and agreeableness. The authors argued that the effect emerges most clearly from studies within families. Results are weak at best, when individuals from different families are compared. The reason is that genetic effects are stronger than birth order effects. Recent studies also support the claim that only children are not markedly different from their peers with siblings. Scientists have found that they share many characteristics with firstborn children including being conscientious as well as parent-oriented.

In her review of the research, Judith Rich Harris suggests that birth order effects may exist within the context of the family of origin, but that they are not enduring aspects of personality. When people are with their parents and siblings, firstborns behave differently than laterborns, even during adulthood. However, most people don't spend their adult lives
in their childhood home. Harris provides evidence that the patterns of behavior acquired in
the childhood home don’t affect the way people behave outside the home, even during
childhood. Harris concludes that birth order effects keep turning up because people keep
looking for them, and keep analyzing and reanalyzing their data until they find them.

Jane Austen’s book Pride and Prejudice, while being a study on a certain form of courtship,
also places stringent analysis on the personalities on five sequential daughters.

**Intelligence**

Since the 1970s, one of the most influential theories to explain why firstborns frequently
score higher on intelligence and achievement tests than other children is the confluence
model of Robert Zajonc. This model states that because firstborns mainly have adult
influences around them in their early years, they will spend their initial years of life
interacting in a highly intellectual family environment. This effect may also be observed in
siblings who, although later born, have a sibling at least five years senior with no siblings in
between. These children are considered to be "functional firstborns". The theory further
suggests that firstborns will be more intelligent than only children, because the latter will
not benefit from the "tutor effect" (i.e. teaching younger siblings).

Zajonc's theory has been criticised for confounding birth order with both age and family
size, and researchers such as D. F. Polit and T. with one other sibling score higher on tests of
verbal ability than laterborns and children with multiple siblings. This observation does
support a conclusion, more modest than the confluence model's stronger claims, that
smaller families lead to children with higher test scores. However, when the metaanalysis
tested more specific claims by comparing firstborns against the members of the other
groups also occupying the upper performance tier (i.e., singletons and children with one
and only one sibling), it found that firstborns do not enjoy any advantage over the
members of the other groups, suggesting that either a) firstborns do not enjoy any
advantage not also enjoyed by those other groups' members or at least b) to whatever
extent firstborns do enjoy unique advantages, members of the other upper-tier groups
enjoy offsetting advantages not shared by firstborns.

While more consistent with resource depletion theory (RDT) than with the confluence
model, these findings also cast doubt upon the claim that RDT is the sole cause of any
 correlation that in fact exists: Were RDT the exclusive explanation, only children would
have an advantage over firstborns (given that siblings divert at least some resources from
both "true" and "functional" firstborns regardless of age difference). The metaanalysis,
however, finds no such effect, leaving open the null hypothesis that other factors, including
but not limited to those enumerated in the confluence model, have some offsetting effect.
For example, in multiple-child families, academic achieve often serves as one of several
arenas in which siblings compete for parental affection and other resources. In well-
functioning families, firstborns reap the side effects not only of tutoring younger siblings
(see above) but also of competing against those siblings to some degree and strengthening
themselves in the process. In families where sibling rivalry reaches a pathological level, and
especially when a scarcity of parental resources such as affection exacerbates already-severe rivalry, firstborns may be less willing to give away competitive advantage by sharing knowledge with their siblings, but the firstborns in question will by that same token likely study harder for their own benefit, gaining reinforcement similar to what they would realize from the teaching process. In each case, other factors at least partially offset the obstacles to achievement that resource depletion poses, especially in the context of comparing siblings’ achievements to those of singletons who engage in neither tutoring nor inter-sibling competition. Moreover, younger as well as firstborn siblings benefit from the process of competing for parental resources that are finite even when they are abundant, meaning that resource depletion is not the only factor in play even for children in the "lower tier," that encompassing laterborns and children with multiple siblings, who do not enjoy any advantage not also enjoyed by firstborns.

The basic finding that firstborns have higher IQ scores has itself been disputed. One group of researchers examined data from the National Longitudinal Survey of Youth (NLSY) (USA), which gave them the opportunity to look at a large randomly selected sample of US families. The sample included children whose academic performance had been reviewed multiple times throughout their academic careers. This study found no relationship between birth order and intelligence. Recent studies of eldest children by both the Harvard Medical Journal (Aug. 2009) and a thesis published by Swedish research scientist Lars Orstenberg (see 'Younger Children, Brighter Futures', May 2009, Bazar Förlag Press) suggested that past research focuses too heavily on early life. Both papers point to a distinctly higher rate of success among second borns later in life in the areas of career as well as wealth. Orstenberg theorized that the more rapid aging process seen in first borns often leads to a deteriorated personal appearance in comparison to siblings. Orstenberg: "First borns struggle with this shift of power and often limit their potential by focusing on it.

**Sexuality**

The fraternal birth order effect is the name given to the observation that the more older brothers a man has, the greater the probability is that he will have a homosexual orientation. The fraternal birth order effect is the strongest known predictor of sexual orientation, with each older brother increasing a man’s odds of being gay by approximately 33%. Even so, the fraternal birth order effect only accounts for a maximum of one seventh of the prevalence of homosexuality in men. There seems to be no effect on sexual orientation in women, and no effect of the number of older sisters.

In the book Homosexuality, Birth Order, and Evolution: Toward an Equilibrium Reproductive Economics of Homosexuality, Edward M. Miller suggests that the birth order effect on homosexuality may be a by-product of an evolved mechanism that shifts personality away from heterosexuality in laterborn sons. This would have the consequence of reducing the probability of these sons engaging in unproductive competition with each other. Evolution may have favored biological mechanisms prompting human parents to exert affirmative pressure toward heterosexual behavior in earlier-born children: As more children in a family survive infancy and early childhood, the continued existence of the
parents’ gene line becomes more assured (cf. the pressure on newly-wed European aristocrats, especially young brides, to produce "an heir and a spare"), and the benefits of encouraging heterosexuality weigh less strongly against the risk of psychological damage that a strongly heteronormative environment poses to a child predisposed toward homosexuality.

**Adler: Style of Life**

The term style of life was used by psychiatrist Alfred Adler as one of several constructs describing the dynamics of the personality.

It reflects the individual’s unique, unconscious, and repetitive way of responding to (or avoiding) the main tasks of living: friendship, love, and work. This style, rooted in a childhood prototype, remains consistent throughout life, unless it is changed through depth psychotherapy.

The style of life is reflected in the unity of an individual’s way of thinking, feeling, and acting. Often, bending an individual away from the needs of others or common sense, movements are made to relieve inferiority feelings or to compensate for those feelings with an unconscious fictional final goal.

Classical Adlerian psychotherapy attempts to dissolve the archaic style of life and stimulate a more creative approach to living.

Adler felt he could distinguish four primary types of style. Three of them he said to be "mistaken styles".

These include the ruling type: aggressive, dominating people who don’t have much social interest or cultural perception; the getting type: dependent people who take rather than give; and the avoiding type: people who try to escape life's problems and take part in not much socially constructive activity. The fourth life style by Adler is the socially useful type: people with a great deal of social interest and activity.

**Adler’s Approach to Personality: Summarized**

**ALFRED ADLER**

**1870 - 1937**

**Dr. C. George Boeree**
I would like to introduce Alfred Adler by talking about someone Adler never knew: Theodore Roosevelt. Born to Martha and Theodore Senior in Manhattan on October 27, 1858, he was said to be a particularly beautiful baby who needed no help entering his new world. His parents were strong, intelligent, handsome, and quite well-to-do. It should have been an idyllic childhood

But "Teedie," as he was called, was not as healthy as he first appeared. He had severe asthma, and tended to catch colds easily, develop coughs and fevers, and suffer from nausea and diarrhea. He was small and thin. His voice was reedy; and remained so even in adulthood. He became malnourished and was often forced by his asthma to sleep sitting up in chairs. Several times, he came dangerously close to dying from lack of oxygen.

Not to paint too negative a picture, Teedie was an active boy -- some would say over-active -- and had a fantastic personality. He was full of curiosity about nature and would lead expeditions of cousins to find mice, squirrels, snakes, frogs, and anything else that could be dissected or pickled. His repeated confinement when his asthma flared up turned him to books, which he devoured throughout his life. He may have been sickly, but he certainly had a desire to live!

After traveling through Europe with his family, his health became worse. He had grown taller but no more muscular. Finally, with encouragement from the family doctor, Roosevelt Senior encouraged the boy, now twelve, to begin lifting weights. Like anything else he tackled, he did this enthusiastically. He got healthier, and for the first time in his life got through a whole month without an attack of asthma.

When he was thirteen, he became aware of another defect of his: When he found that he couldn’t hit anything with the rifle his father had given him. When friends read a billboard to him -- he didn’t realize it had writing on it -- it was discovered that he was terribly nearsighted!

In the same year, he was sent off to the country on his own after a bad attack of asthma. On the way, he was waylaid by a couple of other boys his own age. He found that not only couldn’t he defend himself, he couldn’t even lay a hand on them. He later announced to his father his intention to learn to box. By the time he went to Harvard, he was not only a healthier Teddy Roosevelt, but was a regular winner of a variety of athletic contests.

The rest, as they say, is history. "Teedie" Roosevelt went on to become a successful New York assemblyman, North Dakota cowboy, New York commissioner of police, Assistant secretary of the Navy, lieutenant colonel of the "Rough Riders," the Governor of New York, and best-selling author, all by the age of forty. With the death of President William McKinley in 1901, Theodore Roosevelt became the youngest president of the United States.

How is it that someone so sickly should become so healthy, vigorous, and successful? Why is it that some children, sickly or not, thrive, while others wither away? Is the drive that Roosevelt had peculiar to him, or is it something that lies in each of us? These kinds of
questions intrigued a young Viennese physician named Alfred Adler, and led him to develop his theory, called **Individual Psychology**.

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**Biography**

Alfred Adler was born in the suburbs of Vienna on February 7, 1870, the third child, second son, of a Jewish grain merchant and his wife. As a child, Alfred developed rickets, which kept him from walking until he was four years old. At five, he nearly died of pneumonia. It was at this age that he decided to be a physician.

Alfred was an average student and preferred playing outdoors to being cooped up in school. He was quite outgoing, popular, and active, and was known for his efforts at outdoing his older brother, Sigmund.

He received a medical degree from the University of Vienna in 1895. During his college years, he became attached to a group of socialist students, among which he found his wife-to-be, Raissa Timofeyewna Epstein. She was an intellectual and social activist who had come from Russia to study in Vienna. They married in 1897 and eventually had four children, two of whom became psychiatrists.

He began his medical career as an ophthalmologist, but he soon switched to general practice, and established his office in a lower-class part of Vienna, across from the Prater, a combination amusement park and circus. His clients included circus people, and it has been suggested (Furtmüller, 1965) that the unusual strengths and weaknesses of the performers led to his insights into **organ inferiorities** and **compensation**.

He then turned to psychiatry, and in 1907 was invited to join Freud’s discussion group. After writing papers on organic inferiority, which were quite compatible with Freud’s views, he wrote, first, a paper concerning an **aggression instinct**, which Freud did not approve of, and then a paper on children’s feelings of inferiority, which suggested that Freud’s sexual notions be taken more metaphorically than literally.

Although Freud named Adler the president of the Viennese Analytic Society and the co-editor of the organization’s newsletter, Adler didn’t stop his criticism. A debate between Adler’s supporters and Freud’s was arranged, but it resulted in Adler, with nine other members of the organization, resigning to form the Society for Free Psychoanalysis in 1911. This organization became The Society for Individual Psychology in the following year.

During World War I, Adler served as a physician in the Austrian Army, first on the Russian front, and later in a children’s hospital. He saw first hand the damage that war does, and his thought turned increasingly to the concept of **social interest**. He felt that if humanity was to survive, it
had to change its ways!

After the war, he was involved in various projects, including clinics attached to state schools and the training of teachers. In 1926, he went to the United States to lecture, and he eventually accepted a visiting position at the Long Island College of Medicine. In 1934, he and his family left Vienna forever. On May 28, 1937, during a series of lectures at Aberdeen University, he died of a heart attack.

Theory

Alfred Adler postulates a single "drive" or motivating force behind all our behavior and experience. By the time his theory had gelled into its most mature form, he called that motivating force the **striving for perfection**. It is the desire we all have to fulfill our potentials, to come closer and closer to our ideal. It is, as many of you will already see, very similar to the more popular idea of self-actualization.

"Perfection" and "ideal" are troublesome words, though. On the one hand, they are very positive goals. Shouldn't we all be striving for the ideal? And yet, in psychology, they are often given a rather negative connotation. Perfection and ideals are, practically by definition, things you can't reach. Many people, in fact, live very sad and painful lives trying to be perfect! As you will see, other theorists, like Karen Horney and Carl Rogers, emphasize this problem. Adler talks about it, too. But he sees this negative kind of idealism as a perversion of the more positive understanding. We will return to this in a little while.

Striving for perfection was not the first phrase Adler used to refer to his single motivating force. His earliest phrase was the **aggression drive**, referring to the reaction we have when other drives, such as our need to eat, be sexually satisfied, get things done, or be loved, are frustrated. It might be better called the assertiveness drive, since we tend to think of aggression as physical and negative. But it was Adler's idea of the aggression drive that first caused friction between him and Freud. Freud was afraid that it would detract from the crucial position of the sex drive in psychoanalytic theory. Despite Freud's dislike for the idea, he himself introduced something very similar much later in his life: the death instinct.

Another word Adler used to refer to basic motivation was **compensation**, or striving to overcome. Since we all have problems, short-comings, inferiorities of one sort or another, Adler felt, earlier in his writing, that our personalities could be accounted for by the ways in which we do -- or don't -- compensate or overcome those problems. The idea still plays an important role in his theory, as you will see, but he rejected it as a label for the basic motive because it makes it sound as if it is your problems that cause you to be what you are.

One of Adler's earliest phrases was **masculine protest**. He noted something pretty obvious in his culture (and by no means absent from our own): Boys were held in higher esteem than girls. Boys wanted, often desperately, to be thought of as strong, aggressive, in control.
-- i.e. "masculine" -- and not weak, passive, or dependent -- i.e. "feminine." The point, of course, was that men are somehow basically better than women. They do, after all, have the power, the education, and apparently the talent and motivation needed to do "great things," and women don't.

You can still hear this in the kinds of comments older people make about little boys and girls: If a baby boy fusses or demands to have his own way (masculine protest!), they will say he's a natural boy; If a little girl is quiet and shy, she is praised for her femininity; If, on the other hand, the boy is quiet and shy, they worry that he might grow up to be a sissy; Or if a girl is assertive and gets her way, they call her a "tomboy" and will try to reassure you that she'll grow out of it!

But Adler did not see men's assertiveness and success in the world as due to some innate superiority. He saw it as a reflection of the fact that boys are encouraged to be assertive in life, and girls are discouraged. Both boys and girls, however, begin life with the capacity for "protest!" Because so many people misunderstood him to mean that men are, innately, more assertive, lead him to limit his use of the phrase.

The last phrase he used, before switching to striving for perfection, was striving for superiority. His use of this phrase reflects one of the philosophical roots of his ideas: Friederich Nietzsche developed a philosophy that considered the will to power the basic motive of human life. Although striving for superiority does refer to the desire to be better, it also contains the idea that we want to be better than others, rather than better in our own right. Adler later tended to use striving for superiority more in reference to unhealthy or neurotic striving.

Life style

A lot of this playing with words reflects Adler's groping towards a really different kind of personality theory than that represented by Freud's. Freud's theory was what we nowadays would call a reductionistic one: He tried most of his life to get the concepts down to the physiological level. Although he admitted failure in the end, life is nevertheless explained in terms of basic physiological needs. In addition, Freud tended to "carve up" the person into smaller theoretical concepts -- the id, ego, and superego -- as well.

Adler was influenced by the writings of Jan Smuts, the South African philosopher and statesman. Smuts felt that, in order to understand people, we have to understand them more as unified wholes than as a collection of bits and pieces, and we have to understand them in the context of their environment, both physical and social. This approach is called holism, and Adler took it very much to heart.

First, to reflect the idea that we should see people as wholes rather than parts, he decided to label his approach to psychology individual psychology. The word individual means literally "un-divided."
Second, instead of talking about a person’s personality, with the traditional sense of internal traits, structures, dynamics, conflicts, and so on, he preferred to talk about **style of life** (nowadays, "lifestyle"). Life style refers to how you live your life, how you handle problems and interpersonal relations. Here’s what he himself had to say about it: "The style of life of a tree is the individuality of a tree expressing itself and molding itself in an environment. We recognize a style when we see it against a background of an environment different from what we expect, for then we realize that every tree has a life pattern and is not merely a mechanical reaction to the environment."

**Teleology**

The last point -- that lifestyle is "not merely a mechanical reaction" -- is a second way in which Adler differs dramatically from Freud. For Freud, the things that happened in the past, such as early childhood traumas, determine what you are like in the present. Adler sees motivation as a matter of moving towards the future, rather than being driven, mechanistically, by the past. We are drawn towards our goals, our purposes, our ideals. This is called **teleology**.

Moving things from the past into the future has some dramatic effects. Since the future is not here yet, a teleological approach to motivation takes the necessity out of things. In a traditional mechanistic approach, cause leads to effect: If a, b, and c happen, then x, y, and z must, of necessity, happen. But you don’t have to reach your goals or meet your ideals, and they can change along the way. Teleology acknowledges that life is hard and uncertain, but it always has room for change!

Another major influence on Adler’s thinking was the philosopher Hans Vaihinger, who wrote a book called **The Philosophy of "As If."** Vaihinger believed that ultimate truth would always be beyond us, but that, for practical purposes, we need to create partial truths. His main interest was science, so he gave as examples such partial truths as protons and electrons, waves of light, gravity as distortion of space, and so on. Contrary to what many of us non-scientists tend to assume, these are not things that anyone has seen or proven to exist: They are useful constructs. They work for the moment, let us do science, and hopefully will lead to better, more useful constructs. We use them "as if" they were true. He called these partial truths **fictions**.

Vaihinger, and Adler, pointed out that we use these fictions in day to day living as well. We behave as if we knew the world would be here tomorrow, as if we were sure what good and bad are all about, as if everything we see is as we see it, and so on. Adler called this **fictional finalism**. You can understand the phrase most easily if you think about an example: Many people behave as if there were a heaven or a hell in their personal future. Of course, there may be a heaven or a hell, but most of us don’t think of this as a proven fact. That makes it a "fiction" in Vaihinger’s and Adler’s sense of the word. And finalism refers to the teleology of it: The fiction lies in the future, and yet influences our behavior today.

Adler added that, at the center of each of our lifestyles, there sits one of these fictions, an important one about who we are and where we are going.
Social interest

Second in importance only to striving for perfection is the idea of social interest or social feeling (originally called Gemeinschaftsgefühl or "community feeling"). In keeping with his holism, it is easy to see that anyone "striving for perfection" can hardly do so without considering his or her social environment. As social animals, we simply don't exist, much less thrive, without others, and even the most resolute people-hater forms that hatred in a social context!

Adler felt that social concern was not simply inborn, nor just learned, but a combination of both: It is based on an innate disposition, but it has to be nurtured to survive. That it is to some extent innate is shown by the way babies and small children often show sympathy for others without having been taught to do so. Notice how, when one baby in a nursery begins to cry, they all begin to cry. Or how, when we walk into a room where people are laughing, we ourselves begin to smile.

And yet, right along with the examples of how generous little children can be to others, we have examples of how selfish and cruel they can be. Although we instinctively seem to know that what hurts him can hurt me, and vice versa, we also instinctively seem to know that, if we have to choose between it hurting him and it hurting me, we'll take "hurting him" every time! So the tendency to empathize must be supported by parents and the culture at large. Even if we disregard the possibilities of conflict between my needs and yours, empathy involves feeling the pain of others, and in a hard world, that can quickly become overwhelming. Much easier to just "toughen up" and ignore that unpleasant empathy -- unless society steps in on empathy's behalf!

One misunderstanding Adler wanted to avoid was the idea that social interest was somehow another version of extraversion. Americans in particular tend to see social concern as a matter of being open and friendly and slapping people on the back and calling them by their first names. Some people may indeed express their social concern this way; But other people just use that kind of behavior to further their own ends. Adler meant social concern or feeling not in terms of particular social behaviors, but in the much broader sense of caring for family, for community, for society, for humanity, even for life. Social concern is a matter of being useful to others.

On the other hand, a lack of social concern is, for Adler, the very definition of mental ill-health: All failures -- neurotics, psychotics, criminals, drunkards, problem children, suicides, perverts, and prostitutes -- are failures because they are lacking in social interest.... Their goal of success is a goal of personal superiority, and their triumphs have meaning only to themselves.

Inferiority

Here we are, all of us, "pulled" towards fulfillment, perfection, self-actualization. And yet some of us -- the failures -- end up terribly unfulfilled, baldly imperfect, and far from self-
actualized. And all because we lack social interest, or, to put it in the positive form, because we are too self-interested. So what makes so many of us self-interested?

Adler says it's a matter of being overwhelmed by our **inferiority**. If you are moving along, doing well, feeling competent, you can afford to think of others. If you are not, if life is getting the best of you, then your attentions become increasingly focussed on yourself.

Obviously, everyone suffers from inferiority in one form or another. For example, Adler began his theoretical work considering **organ inferiority**, that is, the fact that each of us has weaker, as well as stronger, parts of our anatomy or physiology. Some of us are born with heart murmurs, or develop heart problems early in life; Some have weak lungs, or kidneys, or early liver problems; Some of us stutter or lisp; Some have diabetes, or asthma, or polio; Some have weak eyes, or poor hearing, or a poor musculature; Some of us have innate tendencies to being heavy, others to being skinny; Some of us are retarded, some of us are deformed; Some of us are terribly tall or terribly short; And so on and so on.

Adler noted that many people respond to these organic inferiorities with **compensation**. They make up for their deficiencies in some way: The inferior organ can be strengthened and even become stronger than it is in others; Or other organs can be overdeveloped to take up the slack; Or the person can psychologically compensate for the organic problem by developing certain skills or even certain personality styles. There are, as you well know, many examples of people who overcame great physical odds to become what those who are better endowed physically wouldn't even dream of!

Sadly, there are also many people who cannot handle their difficulties, and live lives of quiet despair. I would guess that our optimistic, up-beat society seriously underestimates their numbers.

But Adler soon saw that this is only part of the picture. Even more people have **psychological inferiorities**. Some of us are told that we are dumb, or ugly, or weak. Some of us come to believe that we are just plain no good. In school, we are tested over and over, and given grades that tell us we aren't as good as the next person. Or we are demeaned for our pimples or our bad posture and find ourselves without friends or dates. Or we are forced into basketball games, where we wait to see which team will be stuck with us. In these examples, it's not a matter of true organic inferiority -- we are not really retarded or deformed or weak -- but we learn to believe that we are. Again, some compensate by becoming good at what we feel inferior about. More compensate by becoming good at something else, but otherwise retaining our sense of inferiority. And some just never develop any self esteem at all.

If the preceding hasn't hit you personally yet, Adler also noted an even more general form of inferiority: The natural inferiority of children. all children are, by nature, smaller, weaker, less socially and intellectually competent, than the adults around them. Adler suggested that, if we look at children’s games, toys, and fantasies, they tend to have one thing in common: The desire to grow up, to be big, to be an adult. This kind of
compensation is really identical with striving for perfection! Many children, however, are left with the feeling that other people will always be better than they are.

If you are overwhelmed by the forces of inferiority -- whether it is your body hurting, the people around you holding you in contempt, or just the general difficulties of growing up -- you develop an **inferiority complex.** Looking back on my own childhood, I can see several sources for later inferiority complexes: Physically, I've tended to be heavy, with some real "fat boy" stages along the way; Also, because I was born in Holland, I didn't grow up with the skills of baseball, football, and basketball in my genes; Finally, my artistically talented parents often left me -- unintentionally -- with the feeling that I'd never be as good as they were. So, as I grew up, I became shy and withdrawn, and concentrated on the only thing I was good at, school. It took a long time for me to realize my self-worth.

If you weren't "super-nerd," you may have had one of the most common inferiority complexes I've come across: "Math phobia!" Perhaps it started because you could never remember what seven times eight was. Every year, there was some topic you never quite got the hang of. Every year, you fell a little further behind. And then you hit the crisis point: Algebra. How could you be expected to know what "x" is when you still didn't know what seven times eight was?

Many, many people truly believe that they are not meant to do math, that they are missing that piece of their brains or something. I’d like to tell you here and now that anyone can do math, if they are taught properly and when they are really ready. That aside, you’ve got to wonder how many people have given up being scientists, teachers, business people, or even going to college, because of this inferiority complex.

But the inferiority complex is not just a little problem, it's a **neurosis,** meaning it's a life-size problem. You become shy and timid, insecure, indecisive, cowardly, submissive, compliant, and so on. You begin to rely on people to carry you along, even manipulating them into supporting you: "You think I'm smart / pretty / strong / sexy / good, don’t you?" Eventually, you become a drain on them, and you may find yourself by yourself. Nobody can take all that self-centered whining for long!

There is another way in which people respond to inferiority besides compensation and the inferiority complex: You can also develop a **superiority complex.** The superiority complex involves covering up your inferiority by pretending to be superior. If you feel small, one way to feel big is to make everyone else feel even smaller! Bullies, braggarts, and petty dictators everywhere are the prime example. More subtle examples are the people who are given to attention-getting dramatics, the ones who feel powerful when they commit crimes, and the ones who put others down for their gender, race, ethnic origins, religious beliefs, sexual orientation, weight, height, etc. etc. Even more subtle still are the people who hide their feelings of worthlessness in the delusions of power afforded by alcohol and drugs.

**Psychological types**
Although all neurosis is, for Adler, a matter of insufficient social interest, he did note that three types could be distinguished based on the different levels of energy they involved:

The first is the **ruling type**. They are, from childhood on, characterized by a tendency to be rather aggressive and dominant over others. Their energy -- the strength of their striving after personal power -- is so great that they tend to push over anything or anybody who gets in their way. The most energetic of them are bullies and sadists; somewhat less energetic ones hurt others by hurting themselves, and include alcoholics, drug addicts, and suicides.

The second is the **leaning type**. They are sensitive people who have developed a shell around themselves which protects them, but they must rely on others to carry them through life’s difficulties. They have low energy levels and so become dependent. When overwhelmed, they develop what we typically think of as neurotic symptoms: phobias, obsessions and compulsions, general anxiety, hysteria, amnesias, and so on, depending on individual details of their lifestyle.

The third type is the **avoiding type**. These have the lowest levels of energy and only survive by essentially avoiding life -- especially other people. When pushed to the limits, they tend to become psychotic, retreating finally into their own personal worlds.

There is a fourth type as well: the **socially useful type**. This is the healthy person, one who has both social interest and energy. Note that without energy, you can’t really have social interest, since you wouldn’t be able to actually do anything for anyone!

Adler noted that his four types looked very much like the four types proposed by the ancient Greeks. They, too, noticed that some people are always sad, others always angry, and so on. But they attributed these temperaments (from the same root as temperature) to the relative presence of four bodily fluids called **humors**.

If you had too much yellow bile, you would be **choleric** (hot and dry) and angry all the time. The choleric is, roughly, the ruling type.

If you had too much phlegm, you would be **phlegmatic** (cold and wet) and be sluggish. This is roughly the leaning type.

If you had too much black bile -- and we don’t know what the Greeks were referring to here -- you would be **melancholy** (cold and dry) and tend to be sad constantly. This is roughly the avoiding type.

And, if you had a lot of blood relative to the other humors, you would be in a good humor, **sanguine** (warm and moist). This naturally cheerful and friendly person represents the socially useful type.
One word of warning about Adler's types: Adler believed very strongly that each person is a unique individual with his or her own unique lifestyle. The idea of types is, for him, only a heuristic device, meaning a useful fiction, not an absolute reality!

**Childhood**

Adler, like Freud, saw personality or lifestyle as something established quite early in life. In fact, the prototype of your lifestyle tends to be fixed by about five years old. New experiences, rather than change that prototype, tend to be interpreted in terms of the prototype, "force fit," in other words, into preconceived notions, just like new acquaintances tend to get "force fit" into our stereotypes.

Adler felt that there were three basic childhood situations that most contribute to a faulty lifestyle. The first is one we've spoken of several times: organ inferiorities, as well as early childhood diseases. They are what he called "overburdened," and if someone doesn't come along to draw their attention to others, they will remain focussed on themselves. Most will go through life with a strong sense of inferiority; A few will overcompensate with a superiority complex. Only with the encouragement of loved ones will some truly compensate.

The second is **pampering**. Many children are taught, by the actions of others, that they can take without giving. Their wishes are everyone else's commands. This may sound like a wonderful situation, until you realize that the pampered child fails in two ways: First, he doesn't learn to do for himself, and discovers later that he is truly inferior; And secondly, he doesn't learn any other way to deal with others than the giving of commands. And society responds to pampered people in only one way: hatred.

The third is **neglect**. A child who is neglected or abused learns what the pampered child learns, but learns it in a far more direct manner: They learn inferiority because they are told and shown every day that they are of no value; They learn selfishness because they are taught to trust no one. If you haven't known love, you don't develop a capacity for it later. We should note that the neglected child includes not only orphans and the victims of abuse, but the children whose parents are never there, and the ones raised in a rigid, authoritarian manner.

**Birth order**

Adler must be credited as the first theorist to include not only a child's mother and father and other adults as early influence on the child, but the child's brothers and sisters as well. His consideration of the effects of siblings and the order in which they were born is probably what Adler is best-known for. I have to warn you, though, that Adler considered birth-order another one of those heuristic ideas -- useful fictions -- that contribute to understanding people, but must be not be taken too seriously.

The **only child** is more likely than others to be pampered, with all the ill results we've discussed. After all, the parents of the only child have put all their eggs in one basket, so to
speak, and are more likely to take special care -- sometimes anxiety-filled care -- of their pride and joy. If the parents are abusive, on the other hand, the only child will have to bear that abuse alone.

The **first child** begins life as an only child, with all the attention to him- or herself. Sadly, just as things are getting comfortable, the second child arrives and "dethrones" the first. At first, the child may battle for his or her lost position. He or she might try acting like the baby -- after all, it seems to work for the baby! -- only to be rebuffed and told to grow up. Some become disobedient and rebellious, others sullen and withdrawn. Adler believes that first children are more likely than any other to become problem children. More positively, first children are often precocious. They tend to be relatively solitary and more conservative than the other children in the family.

The **second child** is in a very different situation: He or she has the first child as a sort of "pace-setter," and tends to become quite competitive, constantly trying to surpass the older child. They often succeed, but many feel as if the race is never done, and they tend to dream of constant running without getting anywhere. Other "middle" children will tend to be similar to the second child, although each may focus on a different "competitor."

The **youngest child** is likely to be the most pampered in a family with more than one child. After all, he or she is the only one who is never dethroned! And so youngest children are the second most likely source of problem children, just behind first children. On the other hand, the youngest may also feel incredible inferiority, with everyone older and "therefore" superior. But, with all those "pace-setters" ahead, the youngest can also be driven to exceed all of them.

Who is a first, second, or youngest child isn't as obvious as it might seem. If there is a long stretch between children, they may not see themselves and each other the same way as if they were closer together. There are eight years between my first and second daughter and three between the second and the third: That would make my first daughter an only child, my second a first child, and my third the second and youngest! And if some of the children are boys and some girls, it makes a difference as well. A second child who is a girl might not take her older brother as someone to compete with; A boy in a family of girls may feel more like the only child; And so on. As with everything in Adler's system, birth order is to be understood in the context of the individual's own special circumstances.

**Diagnosis**

In order to help you to discover the "fictions" your lifestyle is based upon, Adler would look at a great variety of things -- your birth-order position, for example. First, he might examine you and your medical history for any possible organic roots to your problem. A serious illness, for example, may have side effects that closely resemble neurotic and psychotic symptoms.

In your very first session with you, he might ask for your **earliest childhood memory**. He is not so much looking for the truth here as for an indication of that early prototype of your
present lifestyle. If your earliest memory involves security and a great deal of attention, that might indicate pampering; If you recall some aggressive competition with your older brother, that might suggest the strong strivings of a second child and the "ruling" type of personality; If your memory involves neglect and hiding under the sink, it might mean severe inferiority and avoidance; And so on.

He might also ask about any childhood problems you may have had: Bad habits involving eating or the bathroom might indicate ways in which you controlled your parents; Fears, such as a fear of the dark or of being left alone, might suggest pampering; Stuttering is likely to mean that speech was associated with anxiety; Overt aggression and stealing may be signs of a superiority complex; Daydreaming, isolation, laziness, and lying may be various ways of avoiding facing one's inferiorities.

Like Freud and Jung, dreams (and daydreams) were important to Adler. He took a more direct approach to them, though: Dreams are an expression of your style of life and, far from contradicting your daytime feelings, are unified with your conscious life. Usually, they reflect the goals you have and the problems you face in reaching them. If you can't remember any dreams, Adler isn't put off: Go ahead and fantasize right then and there. Your fantasies will reflect your lifestyle just as well.

Adler would also pay attention to how you express yourself: Your posture, the way you shake hands, the gestures you use, how you move, your "body language," as we say today. He notes that pampered people often lean against something! Even your sleep postures may contribute some insight: A person who sleeps in the fetal position with the covers over his or her head is clearly different from one who sprawls over the entire bed completely uncovered!

He would also want to know the exogenous factors, the events that triggered the symptoms that concern you. He gives a number of common triggers: Sexual problems, like uncertainty, guilt, the first time, impotence, and so on; The problems women face, such as pregnancy and childbirth and the onset and end of menstruation; Your love life, dating, engagement, marriage, and divorce; Your work life, including school, exams, career decisions, and the job itself; And mortal danger or the loss of a loved one.

Last, and not least, Adler was open to the less rational and scientific, more art-like side of diagnosis: He suggested we not ignore empathy, intuition, and just plain guess-work!

**Therapy**

There are considerable differences between Adler's therapy and Freud's: First, Adler preferred to have everyone sitting up and talking face to face. Further, he went to great lengths to avoid appearing too authoritarian. In fact, he advised that the therapist never allow the patient to force him into the role of an authoritarian figure, because that allows the patient to play some of the same games he or she is likely to have played many times before: The patient may set you up as a savior, only to attack you when you inevitably
reveal your humanness. By pulling you down, they feel as if they are raising themselves, with their neurotic lifestyles, up.

This is essentially the explanation Adler gave for resistance: When a patient forgets appointments, comes in late, demands special favors, or generally becomes stubborn and uncooperative, it is not, as Freud thought, a matter of repression. Rather, resistance is just a sign of the patient’s lack of courage to give up their neurotic lifestyle.

The patient must come to understand the nature of his or her lifestyle and its roots in self-centered fictions. This understanding or insight cannot be forced: If you just tell someone "look, here is your problem!" he or she will only pull away from you and look for ways of bolstering their present fictions. Instead, A patient must be brought into such a state of feeling that he likes to listen, and wants to understand. Only then can he be influenced to live what he has understood. (Ansbacher and Ansbacher, 1956, p. 335.) It is the patient, not the therapist, who is ultimately responsible for curing him- or herself.

Finally, the therapist must encourage the patient, which means awakening his or her social interest, and the energy that goes with it. By developing a genuine human relationship with the patient, the therapist provides the basic form of social interest, which the patient can then transfer to others.

Discussion

Although Adler’s theory may be less interesting than Freud’s, with its sexuality, or Jung’s, with its mythology, it has probably struck you as the most common-sensical of the three. Students generally like Adler and his theory. In fact, quite a few personality theorists like him, too. Maslow, for example, once said that, the older he gets, the more right Adler seems. If you have some knowledge of Carl Rogers’ brand of therapy, you may have noticed how similar it is to Adler’s. And a number of students of personality theories have noted that the theorists called Neo-Freudians -- Horney, Fromm, and Sullivan -- should really have been called Neo-Adlerians.

And so the "positives" of Adler’s theory don't really need to be listed: His clear descriptions of people’s complaints, his straight-forward and common-sense interpretations of their problems, his simple theoretical structure, his trust and even affection for the common person, all make his theory both comfortable and highly influential.

Problems

Criticisms of Adler tend to involve the issue of whether or not, or to what degree, his theory is scientific. The mainstream of psychology today is experimentally oriented, which means, among other things, that the concepts a theory uses must be measurable and manipulable. This in turn means that an experimental orientation prefers physical or behavioral variables. Adler, as you saw, uses basic concepts that are far from physical and behavioral:
Striving for perfection? How do you measure that? Or compensation? Or feelings of inferiority? Or social interest? The experimental method also makes a basic assumption: That all things operate in terms of cause and effect. Adler would certainly agree that physical things do so, but he would adamantly deny that people do! Instead, he takes the teleological route, that people are "determined" by their ideals, goals, values, "final fictions." Teleology takes the necessity out of things: A person doesn’t have to respond a certain way to a certain circumstance; A person has choices to make; A person creates his or her own personality or lifestyle. From the experimental perspective, these things are illusions that a scientist, even a personality theorist, dare not give in to.

Even if you are open to the teleological approach, though, there are criticisms you can make regarding how scientific Adler’s theory is: Many of the details of his theory are too anecdotal, that is, are true in particular cases, but don’t necessarily have the generality Adler seems to claim for them. A first child (even broadly defined) doesn’t necessarily feel dethroned, nor a second child necessarily feel competitive, for example.

Adler could, however, respond to these criticisms very easily: First, didn’t we just finish saying that, if you accept teleology, nothing about human personality is necessary. And secondly, didn’t he go to great lengths to explain his ideas about fictional finalism? All of his concepts are useful constructs, not absolute truths, and science is just a matter of creating increasingly useful constructs. So if you have better ideas, let’s hear them!

**Erich Fromm**

Erich Seligmann Fromm (March 23, 1900 – March 18, 1980) was a German-American Jewish social psychologist, psychoanalyst, humanistic philosopher, and democratic
socialist. He was associated with what became known as the Frankfurt School of critical theory.

Life

Erich Fromm was born on 23 March 1900, at Frankfurt am Main, the only child of Orthodox Jewish parents. He started his academic studies in 1918 at the University of Frankfurt am Main with two semesters of jurisprudence. During the summer semester of 1919, Fromm studied at the University of Heidelberg, where he switched from studying jurisprudence to sociology under Alfred Weber (brother of the better known sociologist Max Weber), the psychiatrist-philosopher Karl Jaspers, and Heinrich Rickert. Fromm received his Ph.D. in sociology from Heidelberg in 1922. During the mid 1920s, he was trained to become a psychoanalyst through Frieda Reichmann’s psychoanalytic sanatorium in Heidelberg. He began his own clinical practice in 1927. In 1930, he joined the Frankfurt Institute for Social Research and completed his psychoanalytical training. After the Nazi takeover of power in Germany, Fromm moved to Geneva and then, in 1934, to Columbia University in New York. Karen Horney’s long-term relationship with Fromm is the subject of her book Self Analysis. They each had a marked influence on the other’s thought, with Horney illuminating some aspects of psychoanalysis for Fromm and the latter elucidating sociology for Horney. Their relationship ended in the late 1930s. After leaving Columbia, Fromm helped form the New York branch of the Washington School of Psychiatry in 1943, and in 1946 co-founded the William Alanson White Institute of Psychiatry, Psychoanalysis, and Psychology. He was on the faculty of Bennington College from 1941 to 1949.

When Fromm moved to Mexico City in 1949, he became a professor at the National Autonomous University of Mexico (UNAM) and established a psychoanalytic section at the medical school there. He taught at UNAM until his retirement, in 1965, and at the Mexican Society of Psychoanalysis (SMP) until 1974. Meanwhile, he taught as a professor of psychology at Michigan State University from 1957 to 1961 and as an adjunct professor of psychology at the graduate division of Arts and Sciences at New York University after 1962. In 1974 he moved from Mexico City to Muralto, Switzerland, and died at his home in 1980, five days before his eightieth birthday. All the while, Fromm maintained his own clinical practice and published a series of books.

Psychological theory

Beginning with his first seminal work of 1941, Escape from Freedom (known in Britain as Fear of Freedom), Fromm’s writings were notable as much for their social and political commentary as for their philosophical and psychological underpinnings. Indeed, Escape from Freedom is viewed as one of the founding works of Political psychology. His second important work, Man for Himself: An Inquiry into the Psychology of Ethics, first published in 1947, continued and enriched the ideas of Escape from Freedom. Taken together, these books outlined Fromm’s theory of human character, which was a natural outgrowth of Fromm’s theory of human nature. Fromm’s most popular book was The Art of Loving, an international bestseller first published in 1956, which recapitulated and complemented the
theoretical principles of human nature found in Escape from Freedom and Man for Himself—principles which were revisited in many of Fromm’s other major works.

Central to Fromm’s world view was his interpretation of the Talmud, which he began studying as a young man under Rabbi J. Horowitz and later studied under Rabbi Salman Baruch Rabinkow while working towards his doctorate in sociology at the University of Heidelberg and under Nehemia Nobel and Ludwig Krause while studying in Frankfurt. Fromm’s grandfather and two great grandfathers on his father’s side were rabbis, and a great uncle on his mother’s side was a noted Talmudic scholar. However, Fromm turned away from orthodox Judaism in 1926, towards secular interpretations of scriptural ideals.

The cornerstone of Fromm’s humanistic philosophy is his interpretation of the biblical story of Adam and Eve’s exile from the Garden of Eden. Drawing on his knowledge of the Talmud, Fromm pointed out that being able to distinguish between good and evil is generally considered to be a virtue, and that biblical scholars generally consider Adam and Eve to have sinned by disobeying God and eating from the Tree of Knowledge. However, departing from traditional religious orthodoxy, Fromm extolled the virtues of humans taking independent action and using reason to establish moral values rather than adhering to authoritarian moral values.

Beyond a simple condemnation of authoritarian value systems, Fromm used the story of Adam and Eve as an allegorical explanation for human biological evolution and existential angst, asserting that when Adam and Eve ate from the Tree of Knowledge, they became aware of themselves as being separate from nature while still being part of it. This is why they felt "naked" and "ashamed": they had evolved into human beings, conscious of themselves, their own mortality, and their powerlessness before the forces of nature and society, and no longer united with the universe as they were in their instinctive, pre-human existence as animals. According to Fromm, the awareness of a disunited human existence is a source of guilt and shame, and the solution to this existential dichotomy is found in the development of one’s uniquely human powers of love and reason. However, Fromm distinguished his concept of love from unreflective popular notions as well as Freudian paradoxical love (see criticism by Marcuse below).

Fromm considered love to be an interpersonal creative capacity rather than an emotion, and he distinguished this creative capacity from what he considered to be various forms of narcissistic neuroses and sado-masochistic tendencies that are commonly held out as proof of "true love." Indeed, Fromm viewed the experience of "falling in love" as evidence of one’s failure to understand the true nature of love, which he believed always had the common elements of care, responsibility, respect, and knowledge. Drawing from his knowledge of the Torah, Fromm pointed to the story of Jonah, who did not wish to save the residents of Nineveh from the consequences of their sin, as demonstrative of his belief that the qualities of care and responsibility are generally absent from most human relationships. Fromm also asserted that few people in modern society had respect for the autonomy of their fellow human beings, much less the objective knowledge of what other people truly wanted and needed.
Fromm believed that freedom was an aspect of human nature that we either embrace or escape. He observed that embracing our freedom of will was healthy, whereas escaping freedom through the use of escape mechanisms was the root of psychological conflicts. Fromm outlined three of the most common escape mechanisms: automaton conformity, authoritarianism, and destructiveness. Automaton conformity is changing one’s ideal self to conform to a perception of society’s preferred type of personality, losing one’s true self in the process. Automaton conformity displaces the burden of choice from self to society. Authoritarianism is giving control of oneself to another. By submitting one’s freedom to someone else, this act removes the freedom of choice almost entirely. Lastly, destructiveness is any process which attempts to eliminate others or the world as a whole, all to escape freedom. Fromm said that "the destruction of the world is the last, almost desperate attempt to save myself from being crushed by it".

The word biophilia was frequently used by Fromm as a description of a productive psychological orientation and "state of being". For example, in an addendum to his book The Heart of Man: Its Genius For Good and Evil, Fromm wrote as part of his Humanist Credo:

"I believe that the man choosing progress can find a new unity through the development of all his human forces, which are produced in three orientations. These can be presented separately or together: biophilia, love for humanity and nature, and independence and freedom."

**Erich Fromm postulated EIGHT basic needs:**

**Relatedness**
- Relationships with others, care, respect, knowledge.

**Transcendence**
- Creativity, developing a loving and interesting life.

**Rootedness**
- Feeling of belonging.

**Sense of Identity**
- Seeing ourselves as a unique person and part of a social group.

**Frame of orientation**
- Understanding the world and our place in it.

**Excitation and Stimulation**
- Actively striving for a goal rather than simply responding.

**Unity**
- A sense of oneness between one person and the "natural and human world outside."
Effectiveness
The need to feel accomplished.

Fromm's thesis of the "escape from freedom" is epitomized in the following passage. The "individualized man" referenced by Fromm is man bereft of the "primary ties" of belonging (i.e. nature, family, etc.), also expressed as "freedom from":

"There is only one possible, productive solution for the relationship of individualized man with the world: his active solidarity with all men and his spontaneous activity, love and work, which unite him again with the world, not by primary ties but as a free and independent individual... However, if the economic, social and political conditions... do not offer a basis for the realization of individuality in the sense just mentioned, while at the same time people have lost those ties which gave them security, this lag makes freedom an unbearable burden. It then becomes identical with doubt, with a kind of life which lacks meaning and direction. Powerful tendencies arise to escape from this kind of freedom into submission or some kind of relationship to man and the world which promises relief from uncertainty, even if it deprives the individual of his freedom." (Erich Fromm, Escape from Freedom [N.Y.: Rinehart, 1941], pp. 36-7. The point is repeated on pp. 31, 256-7.)

Six orientations

Fromm also spoke of "orientation of character" in his book Man For Himself, which describes the ways an individual relates to the world and constitutes his general character, and develops from two specific kinds of relatedness to the world: acquiring and assimilating things ("assimilation"), and reacting to people ("socialization"). Fromm considers these character systems the human substitute for instincts in animals. These orientations describe how a man has developed in regard to how he responds to conflicts in his or her life; he also said that people were never pure in any such orientation. These two factors form five types of malignant character, which he calls Receptive, Exploitative, Hoarding, Necrophilious and Marketing. He also described a positive character, which he called Productive.

Fromm's influence on other notable psychologists

Fromm's four non-productive orientations were subject to validation through a psychometric test, The Person Relatedness Test by Elias H. Porter, Ph.D. in collaboration with Carl Rogers, Ph.D. at the University of Chicago's Counseling Center between 1953 and 1955. Fromm's four non-productive orientations also served as basis for the LIFO test, first published in 1967 by Stuart Atkins, Alan Katcher, Ph.D., and Elias Porter, Ph.D. and the Strength Deployment Inventory, first published in 1971 by Chris H. Porter, Ph.D.

Critique of Freud

Fromm examined the life and work of Sigmund Freud at length. He identified a discrepancy between early and later Freudian theory: namely that prior to World War I, Freud described human drives as a tension between desire and repression, but after the war's
conclusion, he framed human drives as a struggle between biologically-universal Life and Death (Eros and Thanatos) instincts. Fromm charged Freud and his followers with never acknowledging the contradictions between the two theories.

He also criticized Freud's dualistic thinking. According to Fromm, Freudian descriptions of human consciousness as struggles between two poles was narrow and limiting. Fromm also condemned him as a misogynist unable to think outside the patriarchal milieu of early 20th century Vienna. However, Fromm expressed a great respect for Freud and his accomplishments, in spite of these criticisms.

**Political ideas and activities**

Fromm’s best known work, Escape from Freedom, focuses on the human urge to seek a source of authority and control upon reaching a freedom that was thought to be an individual’s true desire. Fromm’s critique of the modern political order and capitalist system led him to seek insights from medieval feudalism. In Escape from Freedom, he found favor with the lack of individual freedom, rigid structure, and obligations required on the members of medieval society:

What characterizes medieval in contrast to modern society is its lack of individual freedom...But altogether a person was not free in the modern sense, neither was he alone and isolated. In having a distinct, unchangeable, and unquestionable place in the social world from the moment of birth, man was rooted in a structuralized whole, and thus life had a meaning which left no place, and no need for doubt...There was comparatively little competition. One was born into a certain economic position which guaranteed a livelihood determined by tradition, just as it carried economic obligations to those higher in the social hierarchy.

The culmination of Fromm’s social and political philosophy was his book The Sane Society, published in 1955, which argued in favor of a humanistic and democratic socialism. Building primarily upon the early works of Karl Marx, Fromm sought to re-emphasize the ideal of freedom, missing from most Soviet Marxism, and more frequently found in the writings of libertarian socialists and liberal theoreticians. Fromm’s brand of socialism rejected both Western capitalism and Soviet communism, which he saw as dehumanizing and that resulted in a virtually universal modern phenomenon of alienation. He became one of the founders of socialist humanism, promoting the early writings of Marx and his humanist messages to the US and Western European public.

In the early 1960s, Fromm published two books dealing with Marxist thoughts (Marx’s Concept of Man and Beyond the Chains of Illusion: my Encounter with Marx and Freud). In 1965, working to stimulate the Western and Eastern cooperation between Marxist humanists, Fromm published a series of articles entitled Socialist Humanism: An International Symposium. In 1966, the American Humanist Association named him Humanist of the Year.
For a period, Fromm was also active in US politics. He joined the Socialist Party of America in the mid-1950s, and did his best to help them provide an alternative viewpoint to the prevailing McCarthyism of the time. This alternative viewpoint was best expressed in his 1961 paper May Man Prevail? An Inquiry into the Facts and Fictions of Foreign Policy. However, as a co-founder of SANE, Fromm's strongest political activism was in the international peace movement, fighting against the nuclear arms race and US involvement in the Vietnam War. After supporting Senator Eugene McCarthy's losing bid for the Democratic presidential nomination, Fromm more or less retreated from the American political scene, although he did write a paper in 1974 entitled Remarks on the Policy of Détente for a hearing held by the U.S. Senate Committee on Foreign Relations.

**Criticism**

In Eros and Civilization Herbert Marcuse condemns Fromm, that in the beginning he was a radical theorist who later turned to conformity. Marcuse also argued that Fromm, as well as his close colleagues Sullivan and Karen Horney, removed Freud's libido theory and other radical concepts, which thus reduced psychoanalysis to a set of idealist ethics, which only embrace the status quo. Fromm's response, in both The Sane Society and in The Anatomy of Human Destructiveness, argues that Freud indeed deserves substantial credit for recognizing the central importance of the subconscious, but also that he tended to reify his own concepts that depicted the self as the passive outcome of instinct and social control, with very minimal volition or variability. Fromm argues that later scholars such as Marcuse accepted these concepts as dogma, whereas social-psychology requires a more dynamic theoretical and empirical approach.

**The Fear of Freedom**

The Fear of Freedom, as it is known in Britain and elsewhere in the English-speaking world – published in North America as Escape from Freedom – is a book by the Frankfurt-born psychologist and social theorist Erich Fromm. First published in Britain by Routledge and Kegan Paul in 1942, the book explores over a few short chapters humanity's shifting relationship with freedom, with particular regard to the personal consequences of its absence. Its special emphasis is the psychosocial conditions that facilitated the rise of Nazism.

**Central concepts**

**Fromm's concept of freedom**

Fromm distinguishes between 'freedom from' (negative freedom) and 'freedom to' (positive freedom). The former refers to emancipation from restrictions such as social conventions placed on individuals by other people or institutions. This is the kind of freedom typified by the Existentialism of Sartre, and has often been fought for historically, but according to Fromm, on its own it can be a destructive force unless accompanied by a creative element, 'freedom to' the use of freedom to employ spontaneously the total
integrated personality in creative acts. This, he argues, necessarily implies a true connectedness with others that goes beyond the superficial bonds of conventional social intercourse: "...in the spontaneous realization of the self, man unites himself anew with the world..."

In the process of becoming emancipated from an overbearing authority/set of values, Fromm argues, we are often left with feelings of emptiness and anxiety (he likens this process to the individuation of infants in the normal course of child development) that will not abate until we use our 'freedom to' and develop some form of replacement of the old order. However, a common substitute for exercising "freedom to" or authenticity is to submit to an authoritarian system that replaces the old order with another of different external appearance but identical function for the individual: to eliminate uncertainty by prescribing what to think and how to act. He characterises this as a dialectic historical process whereby the original situation is the thesis and the emancipation from it the antithesis. The synthesis is only reached when something has replaced the original order and provided humans with a new security. Fromm does not indicate that the new system will necessarily be an improvement.

**Freedom in history**

Freedom, argues Fromm, became an important issue in the 20th century, being seen as something to be fought for and defended. However, it has not always occupied such a prominent place in people’s thinking and, as an experience, is not necessarily something that is unambiguously enjoyable.

A major chapter in the book deals with the development of Protestant theology, with a discussion of the work of Calvin and Luther. The collapse of an old social order and the rise of capital led to a more developed awareness that people could be separate autonomous beings and direct their own future rather than simply fulfilling a socioeconomic role. This in turn fed into a new conception of God that had to account for the new freedom while still providing some moral authority. Luther painted a picture of man’s relationship with God that was personal and individuated and free from the influence of the church, while Calvin’s doctrine of predestination suggested that people could not work for salvation but has been chosen arbitrarily before they could make any difference. Both of these, argues Fromm, are responses to a freer economic situation. The first gives individuals more freedom to find holiness in the world around them without a complex church structure. The second, although superficially giving the appearance of a kind of determinism actually provided a way for people to work towards salvation. While people could not change their destinies, they could discover the extent of their holiness by committing themselves to hard work and frugality, both traits that were considered virtuous. In reality this made people work harder to 'prove' to themselves that they were destined for God’s kingdom.

**Escaping freedom**

As 'freedom from- is not an experience we enjoy in itself, Fromm suggests that many people, rather than utilising it successfully, attempt to minimise its negative effects by
developing thoughts and behaviours that provide some form of security. These are as follows:

- **Authoritarianism**: Fromm characterises the authoritarian personality as containing a sadist element and a masochist element. The authoritarian wishes to gain control over other people in a bid to impose some kind of order on the world, they also wish to submit to the control of some superior force which may come in the guise of a person or an abstract idea.

- **Destructiveness**: Although this bears a similarity to sadism, Fromm argues that the sadist wishes to gain control over something. A destructive personality wishes to destroy something it cannot bring under its control.

- **Conformity**: This process is seen when people unconsciously incorporate the normative beliefs and thought processes of their society and experience them as their own. This allows them to avoid genuine free thinking, which is likely to provoke anxiety.

**Freedom in the 20th century**

Fromm analyses the character of Nazi ideology and suggests that the psychological conditions of Germany after the first world war fed into a desire for some form of new order to restore the nation's pride. This came in the form of National Socialism and Fromm's interpretation of Mein Kampf suggests that Hitler had an authoritarian personality structure that not only made him want to rule over Germany in the name of a higher authority (the idea of a natural master race) but also made him an appealing prospect for an insecure working class that needed some sense of pride and certainty. Fromm suggests there is a propensity to submit to authoritarian regimes when nations experience negative freedom but he sounds a positive note when he claims that the work of cultural evolution hitherto cannot be undone and Nazism does not provide a genuine union with the world.

Fromm examines democracy and freedom. Modern democracy and the industrialised nation are models he praises but it is stressed that the kind of external freedom provided by this kind of society can never be utilised to the full without an equivalent inner freedom. Fromm suggests that though we are free from obvious authoritarian influence, we are still dominated in our thinking and behaviour by ideas of 'common sense', the advice of experts and the influence of advertising. The way to become truly free in an individual sense is to become spontaneous in our self-expression and behaviour and respond truthfully to our genuine feelings. This is crystallised in his existential statement "there is only one meaning of life: the act of living it". Fromm counters suggestions that this might lead to social chaos by claiming that being truly in touch with our humanity is to be truly in touch with the needs of those with whom we share the world. This is the meaning of a truly social democracy and the realisation of the positive ‘freedom to’ that arises when people escape the malignant influence of totalising political orders.

Discussing the nature of the apparent freedom of Western democracies, Fromm suggests that Fascism may arise anywhere a people devolve their thinking on authorities rather than
doing it themselves: "The right to express our thoughts ... means something only if we are able to have thoughts of our own". In this he echoes Alexis de Tocqueville, who in his 1840 book Democracy in America stated "It is vain to summon a people who have been rendered so dependent on the central power to choose from time to time the representatives of that power; this rare and brief exercise of their free choice, however important it may be, will not prevent them losing the faculties of thinking, feeling, and acting for themselves, and thus gradually falling below the level of humanity."

**Critique of Freud**

While acknowledging Freud as an acute observer of conditions, Fromm challenges some of the basic premises on which his theory of human nature is founded. Whereas Freud assumes that the individual is fundamentally asocial and egotistical, interacting with others only as objects for the fulfilment of his desires, Fromm argues that we are social beings for whom interaction with others as subjects in their own right is an essential and spontaneous expression of our humanity.

Fromm also challenges Freud’s view of character being essentially formed by the expression or thwarting of primary biological drives, pointing out that cultural factors also contribute significantly. He cites such phenomena as sadism and masochism, suggesting that sexual sadism and masochism are probably only the sexual manifestations of a more generalised psychological state of authoritarianism, rather than originating in sexual drives per se.

Most importantly, Fromm rejects Freud’s assumption that human nature is essentially evil and only societal norms curb the unfettered expression of that evil. Fromm points out that this position, derived from the philosophy of Luther, precludes many common concepts such as truth, justice and freedom.

Overall, whereas Freud’s view of human nature is of a kind of puppet driven by primary biological impulses and malfunctioning when the fulfilment of those primary impulses is thwarted, Fromm believes strongly in free will, asserting that exercising authenticity (in the sense of spontaneously responding to life in the moment) is the goal of human existence, and that it is the thwarting of spontaneous living that leads to the "evil" characteristics of some human natures that Freud and Luther view as innate and common to all.

Fromm suggests that the definition of human nature considered by Freud to be universal (but in our context originating in the North European Reformation), by restricting and deprecating spontaneity and obliging members of society to relinquish their individuality in favour of absolute subservience to a communal authoritarian norm, intrinsically reinforces those negative aspects of human nature against which Freud’s psychiatric practice ostensibly strived. He implies that Freud was unable to detect this conflict by virtue of his parochial view of the authoritarian community in which he lived and operated.
The Art of Loving

The Art of Loving is a book written by psychologist and social philosopher Erich Fromm (1900–80). In this work, Fromm recapitulated and complemented the theoretical principles of human nature found in Fromm’s Escape from Freedom and Man for Himself – principles which were revisited in many of his other major works.

Fromm presents love as a skill that can be taught and developed. He rejects the idea of loving as something magical and mysterious that cannot be analyzed and explained, and is therefore skeptical about popular ideas such as “falling in love” or being helpless in the face of love. Because modern humans are alienated from each other and from nature, we seek refuge from our aloneness in romantic love and marriage (pp. 79–81). However, Fromm observes that real love “is not a sentiment which can be easily indulged in by anyone.” It is only through developing one’s total personality to the capacity of loving one’s neighbor with “true humility, courage, faith and discipline” that one attains the capacity to experience real love. This should be considered a rare achievement (p. vii).

We are starved for love, yet all our attempts to attain love in Western society are bound to fail, unless – like any thing else we want to do well – we practice and improve our self discipline, concentration and patience, and place high priority on our mastery of the art of loving (pp. 99–123). Readers will be disappointed if they expect the kind of easy answers and techniques often presented in self-help psychology bestsellers. Perhaps the closest that the book comes to such a recipe is the idea that the active character of true love involves four basic elements: care, responsibility, respect, and knowledge (p. 24). Each of these is difficult to define and can differ markedly depending on the people involved and their circumstances. Seen in these terms, love is hard work, but it is also the most rewarding kind of work.

One of the most interesting concepts in the book is self-love. According to Fromm, loving oneself is quite different from being arrogant, conceited or egocentric. Loving oneself means caring about oneself, taking responsibility for oneself, respecting oneself, and knowing oneself (e.g. being realistic and honest about one’s strengths and weaknesses). In order to be able to truly love another person, one needs first to love oneself in this way.

Fromm is sceptical of exclusive love, which he calls égoïsme à deux – a relationship in which each person is entirely focussed on the other, to the detriment of other people around them. In a healthy marriage, faithfulness applies to sex, but not to Fromm’s concept of love, because love means a generally caring, responsible, respectful and honest attitude toward all other people.

The book includes explorations of the theories of brotherly love, motherly and fatherly love, erotic love, self-love, and the love of God (pp. 7–76), and an insightful examination into love’s disintegration in contemporary Western culture (pp. 77–98).
Biophilia hypothesis

The biophilia hypothesis suggests that there is an instinctive bond between human beings and other living systems. Edward O. Wilson introduced and popularized the hypothesis in his book entitled Biophilia.

Love of living systems

The term "biophilia" literally means "love of life or living systems." It was first used by Erich Fromm to describe a psychological orientation of being attracted to all that is alive and vital. Wilson uses the term in the same sense when he suggests that biophilia describes "the connections that human beings subconsciously seek with the rest of life." He proposed the possibility that the deep affiliations humans have with nature are rooted in our biology. Unlike phobias, which are the aversions and fears that people have of things in the natural world, philies are the attractions and positive feelings that people have toward certain habitats, activities, and objects in their natural surroundings.

To many people, "nature" means plants as in a park or forest, but the weather and animals are also closely involved. In the book Children and Nature: Psychological, Sociocultural, and Evolutionary Investigations edited by Peter Kahn and Stephen Kellert (page 153), the importance of animals, especially those with which a child can develop a nurturing relationship, is emphasised particularly for early and middle childhood. Chapter 7 of the same book reports on the help that animals can provide to children with autistic-spectrum disorders.

Product of biological evolution

Human preferences toward things in nature, while refined through experience and culture, are hypothetically the product of biological evolution. For example, adult mammals (especially humans) are generally attracted to baby mammal faces and find them appealing across species. The large eyes and small features of any young mammal face are far more appealing than those of the mature adults. The biophilia hypothesis suggests that the positive emotional response that adult mammals have toward baby mammals across species helps increase the survival rates of all mammals.

Similarly, the hypothesis helps explain why ordinary people care for and sometimes risk their lives to save domestic and wild animals, and keep plants and flowers in and around their homes. In other words, our natural love for life helps sustain life.

Development

The hypothesis has since been developed as part of theories of evolutionary psychology in the book The Biophilia Hypothesis and by Lynn Margulis. Also, Stephen Kellert’s work seeks to determine common human responses to perceptions of, and ideas about, plants and animals, and to explain them in terms of the conditions of human evolution.
Erich Fromm’s Approach to Personality: Summarized

ERICH FROMM
1900 - 1980

Dr. C. George Boeree

Biography

Erich Fromm was born in 1900 in Frankfurt, Germany. His father was a business man and, according to Erich, rather moody. His mother was frequently depressed. In other words, like quite a few of the people we’ve looked at, his childhood wasn’t very happy.

Like Jung, Erich came from a very religious family, in his case orthodox Jews. Fromm himself later became what he called an atheistic mystic.

In his autobiography, Beyond the Chains of Illusion, Fromm talks about two events in his early adolescence that started him along his path. The first involved a friend of the family’s:

Maybe she was 25 years of age; she was beautiful, attractive, and in addition a painter, the first painter I ever knew. I remember having heard that she had been engaged but after some time had broken the engagement; I remember that she was almost invariably in the company of her widowed father. As I remember him, he was an old, uninteresting, and rather unattractive man, or so I thought (maybe my judgment was somewhat biased by jealousy). Then one day I heard the shocking news: her father had died, and immediately afterwards, she had killed herself and left a will which stipulated that she wanted to be buried with her father. (p. 4)

As you can imagine, this news hit the 12 year old Erich hard, and he found himself asking what many of us might ask: why? Later, he began finding some answers -- partial ones, admittedly -- in Freud.

The second event was even larger: World War I. At the tender age of 14, he saw the extremes that nationalism could go to. All around him, he heard the message: We (Germans, or more precisely, Christian Germans) are great; They (the English and their allies) are cheap mercenaries. The hatred, the "war hysteria," frightened him, as well it should.

So again he wanted to understand something irrational -- the
irrationality of mass behavior -- and he found some answers, this time in the writings of Karl Marx.

To finish Fromm's story, he received his PhD from Heidelberg in 1922 and began a career as a psychotherapist. He moved to the U.S. in 1934 -- a popular time for leaving Germany! -- and settled in New York City, where he met many of the other great refugee thinkers that gathered there, including Karen Horney, with whom he had an affair.

Toward the end of his career, he moved to Mexico City to teach. He had done considerable research into the relationship between economic class and personality types there. He died in 1980 in Switzerland.

Theory

As his biography suggests, Fromm's theory is a rather unique blend of Freud and Marx. Freud, of course, emphasized the unconscious, biological drives, repression, and so on. In other words, Freud postulated that our characters were determined by biology. Marx, on the other hand, saw people as determined by their society, and most especially by their economic systems.

He added to this mix of two deterministic systems something quite foreign to them: The idea of **freedom**. He allows people to **transcend** the determinisms that Freud and Marx attribute to them. In fact, Fromm makes freedom the central characteristic of human nature!

There are, Fromm points out, examples where determinism alone operates. A good example of nearly pure biological determinism, ala Freud, is animals (at least simple ones). Animals don't worry about freedom -- their instincts take care of everything. Woodchucks, for example, don't need career counseling to decide what they are going to be when they grow up: They are going to be woodchucks!

A good example of socioeconomic determinism, ala Marx, is the traditional society of the Middle Ages. Just like woodchucks, few people in the Middle Ages needed career counseling: They had fate, the Great Chain of Being, to tell them what to do. Basically, if your father was a peasant, you'd be a peasant. If your father was a king, that's what you'd become. And if you were a woman, well, there was only one role for women.

Today, we might look at life in the Middle Ages, or life as an animal, and cringe. But the fact is that the lack of freedom represented by biological or social determinism is easy. Your life has structure, meaning, there are no doubts, no cause for soul-searching, you fit in and never suffered an identity crisis.

Historically speaking, this simple, if hard, life began to get shaken up with the Renaissance. In the Renaissance, people started to see humanity as the center of the universe, instead of God. In other words, we didn't just look to the church (and other traditional
establishments) for the path we were to take. Then came the Reformation, which introduced the idea of each of us being individually responsible for our own soul’s salvation. And then came democratic revolutions such as the American and the French revolutions. Now all of a sudden we were supposed to govern ourselves! And then came the industrial revolution, and instead of tilling the soil or making things with our hands, we had to sell our labor in exchange for money. All of a sudden, we became employees and consumers! Then came socialist revolutions such as the Russian and the Chinese, which introduced the idea of participatory economics. You were no longer responsible only for your own well-being, but for fellow workers as well!

So, over a mere 500 years, the idea of the individual, with individual thoughts, feelings, moral conscience, freedom, and responsibility, came into being. But with individuality came isolation, alienation, and bewilderment. Freedom is a difficult thing to have, and when we can we tend to flee from it.

Fromm describes three ways in which we escape from freedom:

1. Authoritarianism. We seek to avoid freedom by fusing ourselves with others, by becoming a part of an authoritarian system like the society of the Middle Ages. There are two ways to approach this. One is to submit to the power of others, becoming passive and compliant. The other is to become an authority yourself, a person who applies structure to others. Either way, you escape your separate identity.

Fromm referred to the extreme version of authoritarianism as masochism and sadism, and points out that both feel compelled to play their separate roles, so that even the sadist, with all his apparent power over the masochist, is not free to choose his actions. But milder versions of authoritarianism are everywhere. In many classes, for example, there is an implicit contract between students and professors: Students demand structure, and the professor sticks to his notes. It seems innocuous and even natural, but this way the students avoid taking any responsibility for their learning, and the professor can avoid taking on the real issues of his field.

2. Destructiveness. Authoritarians respond to a painful existence by, in a sense, eliminating themselves: If there is no me, how can anything hurt me? But others respond to pain by striking out against the world: If I destroy the world, how can it hurt me? It is this escape from freedom that accounts for much of the indiscriminate nastiness of life -- brutality, vandalism, humiliation, vandalism, crime, terrorism....

Fromm adds that, if a person's desire to destroy is blocked by circumstances, he or she may redirect it inward. The most obvious kind of self-destructiveness is, of course, suicide. But we can also include many illnesses, drug addiction, alcoholism, even the joys of passive entertainment. He turns Freud’s death instinct upside down: Self-destructiveness is frustrated destructiveness, not the other way around.

3. Automaton conformity. Authoritarians escape by hiding within an authoritarian hierarchy. But our society emphasizes equality! There is less hierarchy to hide in (though
plenty remains for anyone who wants it, and some who don’t). When we need to hide, we hide in our mass culture instead. When I get dressed in the morning, there are so many decisions! But I only need to look at what you are wearing, and my frustrations disappear. Or I can look at the television, which, like a horoscope, will tell me quickly and effectively what to do. If I look like, talk like, think like, feel like... everyone else in my society, then I disappear into the crowd, and I don’t need to acknowledge my freedom or take responsibility. It is the horizontal counterpart to authoritarianism.

The person who uses automaton conformity is like a social chameleon: He takes on the coloring of his surroundings. Since he looks like a million other people, he no longer feels alone. He isn’t alone, perhaps, but he’s not himself either. The automaton conformist experiences a split between his genuine feelings and the colors he shows the world, very much along the lines of Horney’s theory.

In fact, since humanity’s "true nature" is freedom, any of these escapes from freedom alienates us from ourselves. Here’s what Fromm had to say:

Man is born as a freak of nature, being within nature and yet transcending it. He has to find principles of action and decision making which replace the principles of instincts. He has to have a frame of orientation which permits him to organize a consistent picture of the world as a condition for consistent actions. He has to fight not only against the dangers of dying, starving, and being hurt, but also against another anger which is specifically human: that of becoming insane. In other words, he has to protect himself not only against the danger of losing his life but also against the danger of losing his mind. (Fromm, 1968, p. 61)

I should add here that freedom is in fact a complex idea, and that Fromm is talking about "true" personal freedom, rather than just political freedom (often called liberty): Most of us, whether they are free or not, tend to like the idea of political freedom, because it means that we can do what we want. A good example is the sexual sadist (or masochist) who has a psychological problem that drives his behavior. He is not free in the personal sense, but he will welcome the politically free society that says that what consenting adults do among themselves is not the state’s business! Another example involves most of us today: We may well fight for freedom (of the political sort), and yet when we have it, we tend to be conformist and often rather irresponsible. We have the vote, but we fail to use it! Fromm is very much for political freedom -- but he is especially eager that we make use of that freedom and take the responsibility that goes with it.

Families

Which of the escapes from freedom you tend to use has a great deal to do with what kind of family you grew up in. Fromm outlines two kinds of unproductive families.

1. Symbiotic families. Symbiosis is the relationship two organisms have who cannot live without each other. In a symbiotic family, some members of the family are "swallowed up" by other members, so that they do not fully develop personalities of their own. The more
obvious example is the case where the parent "swallows" the child, so that the child's personality is merely a reflection of the parent's wishes. In many traditional societies, this is the case with many children, especially girls.

The other example is the case where the child "swallows" the parent. In this case, the child dominates or manipulates the parent, who exists essentially to serve the child. If this sounds odd, let me assure you it is common, especially in traditional societies, especially in the relationship between a boy and his mother. Within the context of the particular culture, it is even necessary: How else does a boy learn the art of authority he will need to survive as an adult?

In reality, nearly everyone in a traditional society learns both how to dominate and how to be submissive, since nearly everyone has someone above them and below them in the social hierarchy. Obviously, the authoritarian escape from freedom is built-in to such a society. But note that, for all that it may offend our modern standards of equality, this is the way people lived for thousands of years. It is a very stable social system, it allows for a great deal of love and friendship, and billions of people live in it still.

2. Withdrawing families. In fact, the main alternative is most notable for its cool indifference, if not cold hatefulfulness. Although withdrawal as a family style has always been around, it has come to dominate some societies only in the last few hundred years, that is, since the bourgeoisie -- the merchant class -- arrive on the scene in force.

The "cold" version is the older of the two, found in northern Europe and parts of Asia, and wherever merchants are a formidable class. Parents are very demanding of their children, who are expected to live up to high, well-defined standards. Punishment is not a matter of a slap upside the head in full anger and in the middle of dinner; it is instead a formal affair, a full-fledged ritual, possibly involving cutting switches and meeting in the woodshed. Punishment is cold-blooded, done "for your own good." Alternatively, a culture may use guilt and withdrawal of affection as punishment. Either way, children in these cultures become rather strongly driven to succeed in whatever their culture defines as success.

This puritanical style of family encourages the destructive escape from freedom, which is internalized until circumstances (such as war) allow its release. I might add that this kind of family more immediately encourages perfectionism -- living by the rules -- which is also a way of avoiding freedom that Fromm does not discuss. When the rules are more important than people, destructiveness is inevitable.

The second withdrawing kind of family is the modern family, found in the most advanced parts of the world, most notably the USA. Changes in attitudes about child rearing have lead many people to shudder at the use of physical punishment and guilt in raising children. The newer idea is to raise your children as your equals. A father should be a boy's best buddy; a mother should be a daughter's soul mate. But, in the process of controlling their emotions, the parents become coolly indifferent. They are, in fact, no longer really parents, just cohabitants with their children. The children, now without any real adult guidance, turn to their peers and to the media for their values. This is the modern, shallow, television family!
The escape from freedom is particularly obvious here: It is automaton conformity. Although this is still very much a minority family in the world (except, of course, on TV!), this is the one Fromm worries about the most. It seems to portend the future.

What makes up a good, healthy, productive family? Fromm suggests it is a family where parents take the responsibility to teach their children reason in an atmosphere of love. Growing up in this sort of family, children learn to acknowledge their freedom and to take responsibility for themselves, and ultimately for society as a whole.

The social unconscious

But our families mostly just reflect our society and culture. Fromm emphasizes that we soak up our society with our mother's milk. It is so close to us that we usually forget that our society is just one of an infinite number of ways of dealing with the issues of life. We often think that our way of doing things is the only way, the natural way. We have learned so well that it has all become unconscious -- the social unconscious, to be precise. So, many times we believe that we are acting according to our own free will, but we are only following orders we are so used to we no longer notice them.

Fromm believes that our social unconscious is best understood by examining our economic systems. In fact, he defines, and even names, five personality types, which he calls orientations, in economic terms! If you like, you can take a personality test made up of lists of adjectives Fromm used to describe his orientations. Click here to see it!

1. **The receptive orientation.** These are people who expect to get what they need. If they don’t get it immediately, they wait for it. They believe that all goods and satisfactions come from outside themselves. This type is most common among peasant populations. It is also found in cultures that have particularly abundant natural resources, so that one need not work hard for one’s sustenance (although nature may also suddenly withdraw its bounty!). It is also found at the very bottom of any society: Slaves, serfs, welfare families, migrant workers... all are at the mercy of others.

This orientation is associated with symbiotic families, especially where children are "swallowed" by parents, and with the masochistic (passive) form of authoritarianism. It is similar to Freud's oral passive, Adler's leaning-getting, and Horney's compliant personality. In its extreme form, it can be characterized by adjectives such as submissive and wishful. In a more moderate form, adjectives such as accepting and optimistic are more descriptive.

2. **The exploitative orientation.** These people expect to have to take what they need. In fact, things increase in value to the extent that they are taken from others: Wealth is preferably stolen, ideas plagiarized, love achieved by coercion. This type is prevalent among history’s aristocracies, and in the upper classes of colonial empires. Think of the English in India for example: Their position was based entirely on their power to take from the indigenous population. Among their characteristic qualities is the ability to be comfortable ordering others around! We can also see it in pastoral barbarians and populations who rely on raiding (such as the Vikings).
The exploitative orientation is associated with the "swallowing" side of the symbiotic family, and with the masochistic style of authoritarianism. They are Freud's oral aggressive, Adler's ruling-dominant, and Horney's aggressive types. In extremes, they are aggressive, conceited, and seducing. Mixed with healthier qualities, they are assertive, proud, captivating.

3. The hoarding orientation. Hoarding people expect to keep. They see the world as possessions and potential possessions. Even loved ones are things to possess, to keep, or to buy. Fromm, drawing on Karl Marx, relates this type to the bourgeoisie, the merchant middle class, as well as richer peasants and crafts people. He associates it particularly with the Protestant work ethic and such groups as our own Puritans.

Hoarding is associated with the cold form of withdrawing family, and with destructiveness. I might add that there is a clear connection with perfectionism as well. Freud would call it the anal retentive type, Adler (to some extent) the avoiding type, and Horney (a little more clearly) the withdrawing type. In its pure form, it means you are stubborn, stingy, and unimaginative. If you are a milder version of hoarding, you might be steadfast, economical, and practical.

4. The marketing orientation. The marketing orientation expects to sell. Success is a matter of how well I can sell myself, package myself, advertise myself. My family, my schooling, my jobs, my clothes -- all are an advertisement, and must be "right." Even love is thought of as a transaction. Only the marketing orientation thinks up the marriage contract, wherein we agree that I shall provide such and such, and you in return shall provide this and that. If one of us fails to hold up our end of the arrangement, the marriage is null and void -- no hard feelings (perhaps we can still be best of friends!) This, according to Fromm, is the orientation of the modern industrial society. This is our orientation!

This modern type comes out of the cool withdrawing family, and tend to use automaton conformity as its escape from freedom. Adler and Horney don't have an equivalent, but Freud might: This is at least half of the vague phallic personality, the type that lives life as flirtation. In extreme, the marketing person is opportunistic, childish, tactless. Less extreme, and he or she is purposeful, youthful, social. Notice today's values as expressed to us by our mass media: Fashion, fitness, eternal youth, adventure, daring, novelty, sexuality... these are the concerns of the "yuppie," and his or her less-wealthy admirers. The surface is everything! Let's go bungee-jumping!

5. The productive orientation. There is a healthy personality as well, which Fromm occasionally refers to as the person without a mask. This is the person who, without disavowing his or her biological and social nature, nevertheless does not shirk away from freedom and responsibility. This person comes out of a family that loves without overwhelming the individual, that prefers reason to rules, and freedom to conformity.

The society that gives rise to the productive type (on more than a chance basis) doesn't exist yet, according to Fromm. He does, of course, have some ideas about what it will be like. He calls it humanistic communitarian socialism. That's quite a mouthful, and made
up of words that aren’t exactly popular in the USA, but let me explain: Humanistic means oriented towards human beings, and not towards some higher entity -- not the all-powerful State nor someone’s conception of God. Communitarian means composed of small communities (Gemeinschaften, in German), as opposed to big government or corporations. Socialism means everyone is responsible for the welfare of everyone else. Thus understood, it’s hard to argue with Fromm’s idealism!

Fromm says that the first four orientations (which others might call neurotic) are living in the having mode. They focus on consuming, obtaining, possessing... They are defined by what they have. Fromm says that "I have it" tends to become "it has me," and we become driven by our possessions!

The productive orientation, on the other hand, lives in the being mode. What you are is defined by your actions in this world. You live without a mask, experiencing life, relating to people, being yourself.

He says that most people, being so used to the having mode, use the word have to describe their problems: "Doctor, I have a problem: I have insomnia. Although I have a beautiful home, wonderful children, and a happy marriage, I have many worries." He is looking to the therapist to remove the bad things, and let him keep the good ones, a little like asking a surgeon to take out your gall bladder. What you should be saying is more like "I am troubled. I am happily married, yet I cannot sleep...." By saying you have a problem, you are avoiding facing the fact that you are the problem -- i.e. you avoid, once again, taking responsibility for your life.

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**Evil**

Fromm was always interested in trying to understand the really evil people of this world -- not just one’s who were confused or mislead or stupid or sick, but the one’s who, with full consciousness of the evil of their acts, performed them anyway: Hitler, Stalin, Charles Manson, Jim Jones, and so on, large and small.
All the orientations we’ve talked about, productive and non-productive, in the having mode or the being mode, have one thing in common: They are all efforts at life. Like Horney, Fromm believed that even the most miserable neurotic is at the least trying to cope with life. They are, to use his word, biophilous, life-loving.

But there is another type of person he calls necrophilous -- the lovers of death. They have the passionate attraction to all that is dead, decayed, putrid, sickly; it is the passion to transform that which is alive into something unalive; to destroy for the sake of destruction; the exclusive interest in all that is purely mechanical. It is the passion "to tear apart living structures."

If you think back to high school, you may remember a few misfits: They were real horror movie aficionados. They may have made models of torture devices and guillotines. They loved to play war games. They liked to blow things up with their chemistry sets. They got a kick out of torturing small animals. They treasured their guns. They were really into mechanical devices. The more sophisticated the technology, the happier they were. Beavis and Butthead are modeled after these kids.

I remember watching an interview on TV once, back during the little war in Nicaragua. There were plenty of American mercenaries among the Contras, and one in particular had caught the reporter’s eye. He was a munitions expert -- someone who blew up bridges, buildings, and, of course, the occasional enemy soldier. When asked how he got into this line of work, he smiled and told the reporter that he might not like the story. You see, when he was a kid, he liked to put firecrackers up the backside of little birds he had caught, light the fuses, let them go, and watch them blow up. This man was a necrophiliac.

Fromm makes a few guesses as to how such a person happens. He suggested that there may be some genetic flaw that prevents them from feeling or responding to affection. It may also be a matter of a life so full of frustration that the person spends the rest of their life in a rage. And finally, he suggests that it may be a matter of growing up with a necrophilous mother, so that the child has no one to learn love from. It is very possible that some combination of these factors is at work. And yet there is still the idea that these people know what they are doing, are conscious of their evil, and choose it. It is a subject that would bear more study!
Human Needs

Erich Fromm, like many others, believed that we have needs that go far beyond the basic, physiological ones that some people, like Freud and many behaviorists, think explain all of our behavior. He calls these human needs, in contrast to the more basic animal needs. And he suggests that the human needs can be expressed in one simple statement: The human being needs to find an answer to his existence.

Fromm says that helping us to answer this question is perhaps the major purpose of culture. In a way, he says, all cultures are like religions, trying to explain the meaning of life. Some, of course, do so better than others.

A more negative way of expressing this need is to say that we need to avoid insanity, and he defines neurosis as an effort to satisfy the need for answers that doesn't work for us. He says that every neurosis is a sort of private religion, one we turn to when our culture no longer satisfies.

He lists five human needs:

1. Relatedness

As human beings, we are aware of our separateness from each other, and seek to overcome it. Fromm calls this our need for relatedness, and views it as love in the broadest sense. Love, he says, "is union with somebody, or something, outside oneself, under the condition of retaining the separateness and integrity of one's own self." (p 37 of The Sane Society). It allows us to transcend our separateness without denying us our uniqueness.

The need is so powerful that sometimes we seek it in unhealthy ways. For example, some seek to eliminate their isolation by submitting themselves to another person, to a group, or to their conception of a God. Others look to eliminate their isolation by dominating others. Either way, these are not satisfying: Your separateness is not overcome.

Another way some attempt to overcome this need is by denying it. The opposite of relatedness is what Fromm calls narcissism. Narcissism -- the love of self -- is natural in infants, in that they don't perceive themselves as separate from the world and others to begin with. But in adults, it is a source of pathology. Like the schizophrenic, the narcissist has only one reality: the world of his own thoughts, feelings, and needs. His world becomes what he wants it to be, and he loses contact with reality.

2. Creativity

Fromm believes that we all desire to overcome, to transcend, another fact of our being: Our sense of being passive creatures. We want to be creators. There are many ways to be creative: We give birth, we plant seeds, we make pots, we paint pictures, we write books, we love each other. Creativity is, in fact, an expression of love.
Unfortunately, some don’t find an avenue for creativity. Frustrated, they attempt to transcend their passivity by becoming destroyers instead. Destroying puts me “above” the things – or people – I destroy. It makes me feel powerful. We can hate as well as love. But in the end, it fails to bring us that sense of transcendence we need.

3. Rootedness

We also need roots. We need to feel at home in the universe, even though, as human beings, we are somewhat alienated from the natural world. The simplest version is to maintain our ties to our mothers. But to grow up means we have to leave the warmth of our mothers’ love. To stay would be what Fromm calls a kind of psychological incest. In order to manage in the difficult world of adulthood, we need to find new, broader roots. We need to discover our brotherhood (and sisterhood) with humanity.

This, too has its pathological side: For example, the schizophrenic tries to retreat into a womb-like existence, one where, you might say, the umbilical cord has never been cut. There is also the neurotic who is afraid to leave his home, even to get the mail. And there’s the fanatic who sees his tribe, his country, his church... as the only good one, the only real one. Everyone else is a dangerous outsider, to be avoided or even destroyed.

4. A sense of identity

"Man may be defined as the animal that can say ‘I.’" (p 62 of The Sane Society) Fromm believes that we need to have a sense of identity, of individuality, in order to stay sane.

This need is so powerful that we are sometimes driven to find it, for example by doing anything for signs of status, or by trying desperately to conform. We sometimes will even give up our lives in order to remain a part of our group. But this is only pretend identity, an identity we take from others, instead of one we develop ourselves, and it fails to satisfy our need.

5. A frame of orientation

Finally, we need to understand the world and our place in it. Again, our society – and especially the religious aspects of our culture -- often attempts to provide us with this understanding. Things like our myths, our philosophies, and our sciences provide us with structure.

Fromm says this is really two needs: First, we need a frame of orientation -- almost anything will do. Even a bad one is better than none! And so people are generally quite gullible. We want to believe, sometimes even desperately. If we don’t have an explanation handy, we will make one up, via rationalization.

The second aspect is that we want to have a good frame of orientation, one that is useful, accurate. This is where reason comes in. It is nice that our parents and others provide us
with explanations for the world and our lives, but if they don’t hold up, what good are they? A frame of orientation needs to be rational.

Fromm adds one more thing: He says we don’t just want a cold philosophy or material science. We want a frame of orientation that provides us with meaning. We want understanding, but we want a warm, human understanding.

Discussion

Fromm, in some ways, is a transition figure or, if you prefer, a theorist that brings other theories together. Most significantly for us, he draws together the Freudian and neo-Freudian theories we have been talking about (especially Adler’s and Horney’s) and the humanistic theories we will discuss later. He is, in fact, so close to being an existentialist that it almost doesn’t matter! I believe interest in his ideas will rise as the fortune of existential psychology does.

Another aspect of his theory is fairly unique to him: his interest in the economic and cultural roots of personality. No one before or since has put it so directly: Your personality is to a considerable extent a reflection of such issues as social class, minority status, education, vocation, religious and philosophical background, and so forth. This has been a very under-represented view, perhaps because of its association with Marxism. But it is, I think, inevitable that we begin to consider it more and more, especially as a counterbalance to the increasing influence of biological theories.

Karen Horney

Karen Horney born Danielsen (16 September 1885 – 4 December 1952) was a German-American psychoanalyst. Her theories questioned some traditional Freudian views, particularly his theory of sexuality, as well as the instinct orientation of psychoanalysis and its genetic psychology. As such, she is often classified as Neo-Freudian.
Career and works

In 1920, Horney took up a position within the Institute for Psychoanalysis in Berlin, where she lectured on psychoanalysis for several years. She also taught at The New School in New York City. Karl Abraham, a correspondent of Sigmund Freud, regarded Karen Horney as an extensively gifted analyst and teacher of psychoanalysis.

By 1923, Oskar Horney's firm had become insolvent, with Oskar developing meningitis soon thereafter. Oskar rapidly became embittered, morose and argumentative. It was also in 1923 that Karen's brother died of a pulmonary infection. Both these events contributed to a worsening of Karen's mental health. She entered into a second state of abject depression; she swam out to sea during a vacation and considered committing suicide. In 1926, Karen and her three daughters moved out of Oskar's house. Four years later, they immigrated to the United States, eventually settling in Brooklyn. Brooklyn was home to a large intellectual community; this was due in part to a high influx of Jewish refugees from Europe, particularly Germany. It was in Brooklyn that Karen became friends with academics such as Erich Fromm and Harry Stack Sullivan, at one point embarking on an intimate relationship with the former, which ended bitterly.

Horney quickly set about establishing herself. Her first career posting in the United States was as the Associate Director of the Chicago Institute for Psychoanalysis. It was while living in Brooklyn that Horney developed and advanced her composite theories regarding neurosis and personality, based on experiences gained from working in psychotherapy. In 1937 she published the book The Neurotic Personality of Our Time, which had wide popular readership. By 1941, Horney was Dean of the American Institute of Psychoanalysis, a training institute for those who were interested in Horney’s own organization, the Association for the Advancement of Psychoanalysis. Horney founded this organization after becoming dissatisfied with the generally strict, orthodox nature of the psychoanalytic community.

Horney’s deviation from Freudian psychology led to her resigning from her post, and she soon took up teaching in the New York Medical College. She also founded a journal, named the American Journal of Psychoanalysis. She taught at the New York Medical College and continued practicing as a psychiatrist until her death in 1952.

Theory of neurosis

Horney looked at neurosis in a different light from other psychoanalysts of the time. Her expansive interest in the subject led her to compile a detailed theory of neurosis, with data from her patients. Horney believed neurosis to be a continuous process—with neuroses commonly occurring sporadically in one’s lifetime. This was in contrast to the opinions of her contemporaries who believed neurosis was, like more severe mental conditions, a negative malfunction of the mind in response to external stimuli, such as bereavement, divorce or negative experiences during childhood and adolescence.
Horney believed these assumptions to be less important, except for influences during childhood. Rather, she placed significant emphasis on parental indifference towards the child, believing that a child's perception of events, as opposed to the parent's intentions, is the key to understanding a person's neurosis. For instance, a child might feel a lack of warmth and affection should a parent make fun of the child's feelings. The parent may also casually neglect to fulfill promises, which in turn could have a detrimental effect on the child's mental state.

From her experiences as a psychiatrist, Horney named ten patterns of neurotic needs. These ten needs are based upon things which she thought all humans require to succeed in life. Horney modified these needs somewhat to correspond with what she believed were individuals' neuroses. A neurotic person could theoretically exhibit all of these needs, though in practice much fewer than the ten here need to be present for a person to be considered a neurotic. The ten needs, as set out by Horney, (classified according to her so-called coping strategies) are as follows:

**Moving Toward People**

1. The need for affection and approval; pleasing others and being liked by them.
2. The need for a partner; one whom they can love and who will solve all problems.

**Moving Against People**

3. The need for power; the ability to bend wills and achieve control over others—while most persons seek strength, the neurotic may be desperate for it.
4. The need to exploit others; to get the better of them. To become manipulative, fostering the belief that people are there simply to be used.
5. The need for social recognition; prestige and limelight.
6. The need for personal admiration; for both inner and outer qualities—to be valued.
7. The need for personal achievement; though virtually all persons wish to make achievements, as with No. 3, the neurotic may be desperate for achievement.

**Moving Away from People**

8. The need for self sufficiency and independence; while most desire some autonomy, the neurotic may simply wish to discard other individuals entirely.
9. The need for perfection; while many are driven to perfect their lives in the form of well being, the neurotic may display a fear of being slightly flawed.
10. Lastly, the need to restrict life practices to within narrow borders; to live as inconspicuous a life as possible.

Upon investigating the ten needs further, Horney found she was able to condense them into three broad categories:

Compliance Needs one and two were assimilated into the "compliance" category. This category is seen as a process of "moving towards people", or self-effacement. Under
Horney’s theory children facing difficulties with parents often use this strategy. Fear of helplessness and abandonment occurs—phenomena Horney refers to as "basic anxiety". Those within the compliance category tend to exhibit a need for affection and approval on the part of their peers. They may also seek out a partner, somebody to confide in, fostering the belief that, in turn, all of life’s problems would be solved by the new cohort. A lack of demands and a desire for inconspicuousness both occur in these individuals.

Aggression Needs three through seven were assimilated into the "aggression" category, also called the "moving against people", or the "expansive" solution. Neurotic children or adults within this category often exhibit anger or basic hostility to those around them. That is, there is a need for power, a need for control and exploitation, and a maintenance of a facade of omnipotence. Manipulative qualities aside, under Horney's assertions the aggressive individual may also wish for social recognition, not necessarily in terms of limelight, but in terms of simply being known (perhaps feared) by subordinates and peers alike. In addition, the individual has needs for a degree of personal admiration by those within this person's social circle and, lastly, for raw personal achievement. These characteristics comprise the "aggressive" neurotic type. Aggressive types also tend to keep people away from them. On the other hand, they only care about their wants and needs. They would do whatever they can to be happy and wouldn’t desist from hurting anyone.

Detachment Needs eight through ten were assimilated into the "detachment" category, also called the "moving-away-from" or "resigning" solution or a detached personality. As neither aggression nor compliance solve parental indifference, Horney recognized that children might simply try to become self sufficient. The withdrawing neurotic may disregard others in a non-aggressive manner, regarding solitude and independence as the way forth. The stringent needs for perfection comprise another part of this category; those withdrawing may strive for perfection above all else, to the point where being flawed is utterly unacceptable. Everything the "detached" type does must be unassailable and refined. They suppress or deny all feelings towards others, particularly love and hate.

Narcissism

Horney saw narcissism quite differently from Freud, Kohut and other mainstream psychoanalytic theorists in that she did not posit a primary narcissism but saw the narcissistic personality as the product of a certain kind of early environment acting on a certain kind of temperament. For her, narcissistic needs and tendencies are not inherent in human nature.

Narcissism is different from Horney’s other major defensive strategies or solutions in that it is not compensatory. Self-idealization is compensatory in her theory, but it differs from narcissism. All the defensive strategies involve self-idealization, but in the narcissistic solution it tends to be the product of indulgence rather than of deprivation. The narcissist’s self-esteem is not strong, however, because it is not based on genuine accomplishments.

Mature theory
Near the end of her career, Karen Horney summarized her ideas in Neurosis and Human Growth: The Struggle Toward Self-Realization, her major work published in 1950. It is in this book that she summarizes her ideas regarding neurosis, clarifying her three neurotic "solutions" to the stresses of life. The expansive solution became a tripartite combination of narcissistic, perfectionistic and arrogant-vindictive approaches to life. (Horney had previously focused on the psychiatric concept of narcissism in a book published in 1939, New Ways in Psychoanalysis). Her other two neurotic "solutions" were also a refinement of her previous views: self-effacement, or submission to others, and resignation, or detachment from others. She described case studies of symbiotic relationships between arrogant-vindictive and self-effacing individuals, labeling such a relationship bordering on sadomasochism as a morbid dependency. She believed that individuals in the neurotic categories of narcissism and resignation were much less susceptible to such relationships of co-dependency with an arrogant-vindictive neurotic.

While non-neurotic individuals may strive for these needs, neurotics exhibit a much deeper, more willful and concentrated desire to fulfill the said needs.

**Neo-Freudianism**

Horney, together with fellow psychoanalyst Alfred Adler, formed the Neo-Freudian discipline.

While Horney acknowledged and agreed with Freud on many issues, she was also critical of him on several key beliefs. Freud’s notion of "penis envy" in particular was subject to genital criticism by Horney. She thought Freud had merely stumbled upon women's jealousy of men’s generic power in the world. Horney accepted that penis envy might occur occasionally in neurotic women, but stated that "womb envy" occurs just as much in men: Horney felt that men were envious of a woman's ability to bear children. The degree to which men are driven to success may be merely a substitute for the fact that they cannot carry, nurture and bear children.

Horney was bewildered by psychiatrists’ tendency to place so much emphasis on the male sexual organ. Horney also reworked the Freudian Oedipal complex of the sexual elements, claiming that the clinging to one parent and jealousy of the other was simply the result of anxiety, caused by a disturbance in the parent-child relationship.

Despite these variances with the prevalent Freudian view, Horney strove to reformulate Freudian thought, presenting a holistic, humanistic view of the individual psyche which placed much emphasis on cultural and social differences worldwide.

**Theory of the self**

Horney also shared Abraham Maslow’s view that self-actualization is something that all people strive for. By "self" she understood the core of one’s own being and potential. Horney believed that if we have an accurate conception of our own self, then we are free to realize our potential and achieve what we wish, within reasonable boundaries. Thus, she
believed that self-actualization is the healthy person’s aim through life—as opposed to the neurotic's clinging to a set of key needs.

According to Horney we can have two views of our self: the "real self" and the "ideal self". The real self is who and what we actually are. The ideal self is the type of person we feel that we should be. The real self has the potential for growth, happiness, will power, realization of gifts, etc., but it also has deficiencies. The ideal self is used as a model to assist the real self in developing its potential and achieving self-actualization. (Engler 125) But it is important to know the differences between our ideal and real self.

The neurotic person's self is split between an idealized self and a real self. As a result, neurotic individuals feel that they somehow do not live up to the ideal self. They feel that there is a flaw somewhere in comparison to what they "should" be. The goals set out by the neurotic are not realistic, or indeed possible. The real self then degenerates into a "despised self", and the neurotic person assumes that this is the "true" self. Thus, the neurotic is like a clock's pendulum, oscillating between a fallacious "perfection" and a manifestation of self-hate. Horney referred to this phenomenon as the "tyranny of the shoulders" and the neurotic's hopeless "search for glory". She concluded that these ingrained traits of the psyche forever prevent an individual's potential from being actualized unless the cycle of neurosis is somehow broken, through treatment or otherwise.

**Feminine psychology**

Horney was also a pioneer in the discipline of feminine psychiatry. As one of the first female psychiatrists, she was the first of her gender to present a paper regarding feminine psychiatry. The fourteen papers she wrote between 1922 and 1937 were amalgamated into a single volume titled Feminine Psychology. As a woman, she felt that the mapping out of trends in female behaviour was a neglected issue. In her essay entitled "The Problem of Feminine Masochism" Horney felt she proved that cultures and societies worldwide encouraged women to be dependent on men for their love, prestige, wealth, care and protection. She pointed out that in the society, a will to please, satiate and overvalue men had emerged. Women were regarded as objects of charm and beauty—at variance with every human being’s ultimate purpose of self-actualization.

Women, according to Horney, traditionally gain value only through their children and the wider family. She touched further on this subject in her essay "The Distrust Between the Sexes" in which she compared the husband-wife relationship to a parent-child relationship—one of misunderstanding and one which breeds detrimental neuroses. Most notably her work "The Problem of the Monogamous Ideal" was fixed upon marriage, as were six other of Horney's papers. Her essay "Maternal Conflicts" attempted to shed new light on the problems women experience when raising adolescents.

Horney believed that both men and women have a motive to be ingenious and productive. Women are able to satisfy this need normally and interiorly—to do this they become pregnant and give birth. Men please this need only through external ways; Horney
proposed that the striking accomplishments of men in work or some other field can be viewed as compensation for their inability to give birth to children.

Horney developed her ideas to the extent that she released one of the first "self-help" books in 1946, entitled Are You Considering Psychoanalysis?. The book asserted that those, both male and female, with relatively minor neurotic problems could, in effect, be their own psychiatrists. She continually stressed that self-awareness was a part of becoming a better, stronger, richer human being.

Karen Horney Clinic

The Karen Horney Clinic opened on May 6, 1955 in New York City, in honor of Horney's achievements. The institution seeks to research and train medical professionals, particularly in the psychiatric fields, as well as serving as a low-cost treatment center.

Basic Anxiety

Basic Anxiety is a term used by the psychologist Karen Horney to explain the ramifications of poor parenting. Basic anxiety is deep insecurity and fear that have developed in the child because of the way they were treated by their parents. It is developed because of the conflict with dependency and hostility towards mom, dad, or both. Horney argued that a child is tied to his or her parent because of dependence, not sex (as Sigmund Freud would argue). The child is dependent on the mother and father for food, shelter, and the basic needs. However, the child realizes that no matter how terrible mother and father treat him or her, he or she has nowhere to go because they are so dependent on the parents.

Basic Hostility

Basic Hostility is a psychological concept first described by psychoanalyst Karen Horney. It is an effect of Basic Evil which is also known as parental abuse. Horney described it as a bad attitude which develops in the child as a result of Basic Evil, such as parental abuse. The child is mistreated and becomes angry, but can do nothing as he is dependent upon the very persons who mistreat him.

The pattern of Basic Hostility

- The child wants to leave, but cannot. Although the child wants to avoid the abuse, his parents are perpetrating it.
- The child cannot move away or fight back against his parents because he is dependent on them.
- The child therefore redirects his feelings and expressions of hostility toward people he does not depend on for support.

According to Horney, some children find Basic Hostility to be an aggressive coping strategy and continue using it to deal with life's problems.
Womb and vagina envy

In Feminist psychology the terms womb envy and vagina envy denote the unexpressed anxiety men feel in natural envy of the biological functions of women (pregnancy, parturition, breast feeding) — emotions which impel their social subordination of women, and to drive themselves to succeed in perpetuating their names via material legacies. Each term is analogous to the concept of female penis envy, derived from the theory of psychosexual development, presented in Freudian psychology; they address the gender role social dynamics underlying the “envy and fascination with the female breasts and lactation, with pregnancy and childbearing, and vagina envy [that] are clues to a femininity complex of men, which is defended against by psychological and sociocultural means”.

Womb envy denotes the envy men feel towards a woman’s primary role in nurturing and sustaining life. In coining the term, the Neo-Freudian psychiatrist Karen Horney (1885–1952) proposed that men experience womb envy more powerfully than women experience penis envy, because “men need to disparage women more than women need to disparage men”. As a psychoanalyst, Horney considered womb envy a cultural, psychosocial tendency, like the concept of penis envy, rather than an innate male psychological trait.

Furthermore, in Eve’s Seed: Biology, the Sexes, and the Course of History (2000), historian Robert S. McElvaine extended Horney’s argument that womb envy is a powerful, elementary factor in the psychological insecurity suffered by many men. He coined the term Non-Menstrual Syndrome (NMS), denoting a man’s insecurity before the biologic and reproductive powers of woman; thus, womb envy impels men to define their identities in opposition to women. Hence, men who are envious of women’s reproductive power insist that a “real man” must be “not-a-woman”, thus they seek to socially dominate women — what they may or may not do in life — as psychological compensation for what men cannot do biologically.

Vagina envy denotes the envy men feel towards women for having a vagina. In Psychoanalysis and Male Sexuality (1966), Hendrik Ruitenbeek relates vagina envy to men’s desire to be able to give birth and to urinate and to masturbate in ways physically different from those available to men, and that such psychological envy might produce misogyny in neurotic men. Moreover, in Vagina Envy in Men (1993), the physician Harold Tarpley elucidates the theoretic differences among the constructs of vagina envy, womb envy, breast envy, and parition envy, emotions wherein men suffer envy — “a grudging desire for another’s excellence or advantage” — of women's female biologic capabilities of pregnancy, parturition, breast feeding, and the of the social-role freedom to physically nurture children.
KAREN HORNEY: Theory of Personality Summarized

1885 - 1952

Dr. C. George Boeree

Biography

Karen Horney was born September 16, 1885, to Clotilde and Berndt Wackels Danielson. Her father was a ship's captain, a religious man, and an authoritarian. His children called him "the Bible thrower," because, according to Horney, he did! Her mother, who was known as Sonni, was a very different person -- Berndt's second wife, 19 years his junior, and considerably more urbane. Karen also had an older brother, also named Berndt, for whom she cared deeply, as well as four older siblings from her father's previous marriage.

Karen Horney's childhood seems to have been one of misperceptions: For example, while she paints a picture of her father as a harsh disciplinarian who preferred her brother Berndt over her, he apparently brought her gifts from all over the world and even took her on three long sea voyages with him -- a very unusual thing for sea captains to do in those days! Nevertheless, she felt deprived of her father's affections, and so became especially attached to her mother, becoming, as she put it, "her little lamb."

At the age of nine, she changed her approach to life, and became ambitious and even rebellious. She said "If I couldn't be pretty, I decided I would be smart," which is only unusual in that she actually was pretty! Also during this time, she developed something of a crush on her own brother. Embarrassed by her attentions, as you might expect of a young teenage boy, he pushed her away. This led to her first bout with depression -- a problem that would plague her the rest of her life.

In early adulthood came several years of stress. In 1904, her mother divorced her father and left him with Karen and young Berndt. In 1906, she entered medical school, against her parents' wishes and, in fact, against the opinions of polite society of the time. While there, she met a law student named Oscar Horney, whom she married in 1909. In 1910, Karen gave birth to Brigitte, the first of her three daughters. In 1911, her mother Sonni died. The strain of these events were hard on Karen, and she entered psychoanalysis.

As Freud might have predicted, she had married a man not unlike her father: Oscar was an authoritarian as harsh with his children as the captain had been with his. Horney notes that she did not intervene, but rather considered the atmosphere good for her children and
encouraging their independence. Only many years later did hindsight change her perspective on childrearing.

In 1923, Oskar’s business collapsed and he developed meningitis. He became a broken man, morose and argumentative. Also in 1923, Karen’s brother died at the age of 40 of a pulmonary infection. Karen became very depressed, to the point of swimming out to a sea piling during a vacation with thoughts of committing suicide.

Karen and her daughters moved out of Oskar’s house in 1926 and, four years later, moved to the U.S., eventually settling in Brooklyn. In the 1930’s, Brooklyn was the intellectual capital of the world, due in part to the influx of Jewish refugees from Germany. It was here that she became friends with such intellectuals as Erich Fromm and Harry Stack Sullivan, even pausing to have an affair with the former. And it was here that she developed her theories on neurosis, based on her experiences as a psychotherapist.

She practiced, taught, and wrote until her death in 1952.

 Theory

Horney’s theory is perhaps the best theory of neurosis we have. First, she offered a different way of viewing neurosis. She saw it as much more continuous with normal life than previous theorists. Specifically, she saw neurosis as an attempt to make life bearable, as a way of "interpersonal control and coping." This is, of course, what we all strive to do on a day-to-day basis, only most of us seem to be doing alright, while the neurotic seems to be sinking fast.

In her clinical experience, she discerned ten particular patterns of neurotic needs. They are based on things that we all need, but they have become distorted in several ways by the difficulties of some people’s lives:

Let’s take the first need, for affection and approval, as an example. We all need affection, so what makes such a need neurotic? First, the need is unrealistic, unreasonable, indiscriminate. For example, we all need affection, but we don’t expect it from everyone we meet. We don’t expect great outpourings of affection from even our close friends and relations. We don’t expect our loved ones to show affection at all times, in all circumstances. We don’t expect great shows of love while our partners are filing out tax forms, for example. And, we realize that there may be times in our lives where we have to be self-sufficient.

Second, the neurotic’s need is much more intense, and he or she will experience great anxiety if the need is not met, or if it even appears that it may not be met in the future. It is this, of course, that leads to the unrealistic nature of the need. Affection, to continue the example, has to be shown clearly at all times, in all circumstances, by all people, or the panic sets in. The neurotic has made the need too central to their existence.
The **neurotic needs** are as follows:

1. The neurotic need for affection and approval, the indiscriminate need to please others and be liked by them.

2. The neurotic need for a partner, for someone who will take over one's life. This includes the idea that love will solve all of one's problems. Again, we all would like a partner to share life with, but the neurotic goes a step or two too far.

3. The neurotic need to restrict one's life to narrow borders, to be undemanding, satisfied with little, to be inconspicuous. Even this has its normal counterpart. Who hasn't felt the need to simplify life when it gets too stressful, to join a monastic order, disappear into routine, or to return to the womb?

4. The neurotic need for power, for control over others, for a facade of omnipotence. We all seek strength, but the neurotic may be desperate for it. This is dominance for its own sake, often accompanied by a contempt for the weak and a strong belief in one's own rational powers.

5. The neurotic need to exploit others and get the better of them. In the ordinary person, this might be the need to have an effect, to have impact, to be heard. In the neurotic, it can become manipulation and the belief that people are there to be used. It may also involve a fear of being used, of looking stupid. You may have noticed that the people who love practical jokes more often than not cannot take being the butt of such a joke themselves!

6. The neurotic need for social recognition or prestige. We are social creatures, and sexual ones, and like to be appreciated. But these people are overwhelmingly concerned with appearances and popularity. They fear being ignored, be thought plain, "uncool," or "out of it."

7. The neurotic need for personal admiration. We need to be admired for inner qualities as well as outer ones. We need to feel important and valued. But some people are more desperate, and need to remind everyone of their importance -- "Nobody recognizes genius," "I'm the real power behind the scenes, you know," and so on. Their fear is of being thought nobodies, unimportant and meaningless.

8. The neurotic need for personal achievement. Again, there is nothing intrinsically wrong with achievement -- far from it! But some people are obsessed with it. They have to be number one at everything they do. Since this is, of course, quite a difficult task, you will find these people devaluing anything they cannot be number one in! If they are good runners, then the discus and the hammer are "side shows." If academic abilities are their strength, physical abilities are of no importance, and so on.

9. The neurotic need for self-sufficiency and independence. We should all cultivate some autonomy, but some people feel that they shouldn't ever need anybody. They tend to refuse help and are often reluctant to commit to a relationship.
10. The neurotic need for perfection and unassailability. To become better and better at life and our special interests is hardly neurotic, but some people are driven to be perfect and scared of being flawed. They can’t be caught making a mistake and need to be in control at all times.

As Horney investigated these neurotic needs, she began to recognize that they can be clustered into three broad coping strategies:

I. **Compliance**, which includes needs one, two, and three.

II. **Aggression**, including needs four through eight.

III. **Withdrawal**, including needs nine, ten, and three. She added three here because it is crucial to the illusion of total independence and perfection that you limit the breadth of your life!

In her writings, she used a number of other phrases to refer to these three strategies. Besides compliance, she referred to the first as the **moving-toward strategy** and the **self-effacing solution**. One should also note that it is the same as Adler’s getting or leaning approach, or the phlegmatic personality.

Besides aggression, the second was referred to as **moving-against** and the **expansive solution**. It is the same as Alder’s ruling or dominant type, or the choleric personality.

And, besides withdrawal, she called the third **moving-away from** and the **resigning solution**. It is somewhat like Adler’s avoiding type, the melancholy personality.

**Development**

It is true that some people who are abused or neglected as children suffer from neuroses as adults. What we often forget is that most do not. If you have a violent father, or a schizophrenic mother, or are sexually molested by a strange uncle, you may nevertheless have other family members that love you, take care of you, and work to protect you from further injury, and you will grow up to be a healthy, happy adult. It is even more true that the great majority of adult neurotics did not in fact suffer from childhood neglect or abuse! So the question becomes, if it is not neglect or abuse that causes neurosis, what does?

Horney’s answer, which she called the "basic evil," is **parental indifference**, a lack of warmth and affection in childhood. Even occasional beatings or an early sexual experience can be overcome, if the child feels wanted and loved.

The key to understanding parental indifference is that it is a matter of the child’s perception, and not the parents’ intentions. "The road to hell," it might pay to remember, "is paved with good intentions." A well-intentioned parent may easily communicate indifference to children with such things as showing a preference for one child over another, blaming a child for what they may not have done, overindulging one moment and
rejecting another, neglecting to fulfill promises, disturbing a child’s friendships, making fun of a child’s thinking, and so on. Please notice that many parents -- even good ones -- find themselves doing these things because of the many pressures they may be under. Other parents do these things because they themselves are neurotic, and place their own needs ahead of their children’s

Horney noticed that, in contrast to our stereotypes of children as weak and passive, their first reaction to parental indifference is anger, a response she calls basic hostility. To be frustrated first leads to an effort at protesting the injustice.

Some children find this hostility effective, and over time it becomes a habitual response to life's difficulties. In other words, they develop an aggressive coping strategy. They say to themselves, "If I have power, no one can hurt me."

Most children, however, find themselves overwhelmed by basic anxiety, which in children is mostly a matter of fear of helplessness and abandonment. For survival’s sake, basic hostility must be suppressed and the parents won over. If this seems to work better for the child, it may become the preferred coping strategy -- compliance. They say to themselves, "If I can make you love me, you will not hurt me."

Some children find that neither aggression nor compliance eliminate the perceived parental indifference. They "solve" the problem by withdrawing from family involvement into themselves, eventually becoming sufficient unto themselves -- the third coping strategy. They say, "If I withdraw, nothing can hurt me."

Self theory

Horney had one more way of looking at neurosis -- in terms of self images. For Horney, the self is the core of your being, your potential. If you were healthy, you would have an accurate conception of who you are, and you would then be free to realize that potential (self-realization).

The neurotic has a different view of things. The neurotics self is "split" into a despised self and an ideal self. Other theorists postulate a "looking-glass" self, the you think others see. If you look around and see (accurately or not) others despising you, then you take that inside you as what you assume is the real you. On the other hand, if you are lacking in some way, that implies there are certain ideals you should be living up to. You create an ideal self out of these "shoulds." Understand that the ideal self is not a positive goal; it is unrealistic and ultimately impossible. So the neurotic swings back and forth between hating themselves and pretending to be perfect.
Horney described this stretching between the despised and ideal selves as "the tyranny of the shoulds" and neurotic "striving for glory."

The compliant person believes "I should be sweet, self-sacrificing, saintly."
The aggressive person says "I should be powerful, recognized, a winner."
The withdrawing person believes "I should be independent, aloof, perfect."

And while vacillating between these two impossible selves, the neurotic is alienated from their true core and prevented from actualizing their potentials.

**Discussion**

At first glance, it may appear that Horney stole some of Adler's best ideas. It is clear, for example, that her three coping strategies are very close to Adler's three types. It is, of course, quite conceivable that she was influenced by Adler. But if you look at how she derived her three strategies -- by collapsing groups of neurotic needs -- you see that she simply came to the same conclusions from a different approach. There is no question, of course, that Adler and Horney (and Fromm and Sullivan) form an unofficial school of psychiatry. They are often called neo-Freudians, although that is rather inaccurate. Unfortunately, the other common term is the Social Psychologists which, while accurate, is a term already used for an area of study.

Please notice how Horney's self theory fleshes out Adler's theory about the differences between healthy and neurotic striving for perfection, and (to get ahead of ourselves a bit) how similar this conception is to Carl Rogers'. I usually feel that, when different people come up with similar ideas relatively independently, this is a good sign we're getting at something valuable!

Karen Horney had a couple more interesting ideas that should be mentioned. First, she criticized Freud's idea of penis envy. Although she conceded that it did occasionally occur in neurotic women, she felt strongly that it was not anywhere near to a universal. She suggested that what may appear to be signs of penis envy is really justified envy of men's power in this world.

In fact, she suggested, there may also be a male counterpart to penis envy -- womb envy -- in some men who feel envious of a woman's ability to bear children. Perhaps the degree to which many men are driven to succeed, and to have their names live on after them, is in
compensation for their inability to more directly extend themselves into the future by means of carrying, bearing, and nurturing their children!

A second idea, one that still gets little respect in the psychological community, is self-analysis. Horney wrote one of the earliest "self-help" books, and suggested that, with relatively minor neurotic problems, we could be our own psychiatrists. You can see how this might threaten a few of the delicate egos who make their livings as therapists! I am always surprised at the negative reaction some of my colleagues have to people like Joyce Brothers, the famous psychologist-columnist. Apparently, if you aren’t working within the official guidelines, your work is dismissed as “pop psych.”

The major negative comment I might make about Horney is that her theory is limited to the neurotic. Besides leaving out psychotics and other problems, she leaves out the truly healthy person. Nevertheless, since she does put neurosis and health on a single continuum, she does speak to the neurotic in all of us.

**Harry Stack Sullivan**

Harry Stack Sullivan (February 21, 1892, Norwich, New York - January 14, 1949, Paris, France) was a U.S. psychiatrist whose work in psychoanalysis was based on direct and verifiable observation (versus the more abstract conceptions of the unconscious mind favored by Sigmund Freud and his disciples).
Life and works

Sullivan was a child of Irish immigrants and allegedly grew up in an anti-Catholic town. This resulted in social isolation which might have been the incentive for his later interest in psychiatry. He attended the Smyrna Union School after graduating there spent two years at Cornell University from 1909. He received his medical degree in Chicago College of Medicine and Surgery in 1917.

Along with Clara Thompson, Karen Horney, Erich Fromm, Otto Allen Will, Jr., Erik H. Erikson, and Frieda Fromm-Reichmann, Sullivan laid the groundwork for understanding the individual based on the network of relationships in which he or she is enmeshed. He developed a theory of psychiatry based on interpersonal relationships where cultural forces are largely responsible for mental illnesses (see also social psychiatry). In his words, one must pay attention to the "interactional", not the "intrapsychic". This search for satisfaction via personal involvement with others led Sullivan to characterize loneliness as the most painful of human experiences. He also extended the Freudian psychoanalysis to the treatment of patients with severe mental disorders, particularly schizophrenia.

Besides making the first mention of the significant other in psychological literature, Sullivan developed the Self System, a configuration of the personality traits developed in childhood and reinforced by positive affirmation and the security operations developed in childhood to avoid anxiety and threats to self-esteem. Sullivan further defined the Self System as a steering mechanism toward a series of I-You interlocking behaviors; that is, what an individual does is meant to elicit a particular reaction. Sullivan called these behaviors parataxical integrations, and he noted that such action-reaction combinations can become rigid and dominate an adult's thinking pattern, limiting its actions and reactions toward the world as the adult sees it and not as it really is. The resulting inaccuracies in judgment Sullivan termed parataxic distortion, when other persons are perceived or evaluated based on the patterns of previous experience, similar to Freud's notion of transference. Sullivan also introduced the concept of "prototaxic communication" as a more primitive, needy, infantile form of psychic interchange and of "syntactic communication" as a mature style of emotional interaction.

Sullivan's work on interpersonal relationships became the foundation of interpersonal psychoanalysis, a school of psychoanalytic theory and treatment that stresses the detailed exploration of the nuances of patients' patterns of interacting with others.

Sullivan was the first to coin the term "problems in living" to describe the difficulties with self and others experienced by those with so-called mental illnesses. This phrase was later picked up and popularized by Thomas Szasz, whose work was a foundational resource for the antipsychiatry movement. "Problems in living" went on to become the movement's preferred way to refer to the manifestations of mental disturbances.
He was one of the founders of the William Alanson White Institute, considered by many to be the world's leading independent psychoanalytic institute, and of the journal Psychiatry in 1937. He headed the Washington School of Psychiatry (DC) from 1936 to 1947.

In 1940, Sullivan and colleague Winfred Overholser formulated guidelines for the psychological screening of inductees to the United States military.

He made his reputation based on his experimental treatment ward for schizophrenics at the Sheppard Pratt Hospital, between 1925-29. The ward had a cure rate of approximately 86% without neuroleptic medication. All of the patients on the ward were gay men, and the specially trained ward attendants were either gay or gay-friendly. Thus the patients, who were all young male homosexuals as well as schizophrenics, in their positive interactions with the attendants, would heal the wounds from societal prejudice and missing male intimacy.

Sullivan had a long-term relationship with James Inscoe Sullivan ("Jimmie"). Jimmie was known to Sullivan's associates as his adopted son, which allowed Sullivan to keep his sexual identity in the closet.

Writings

Although Sullivan published little in his lifetime, he influenced generations of mental health professionals, especially through his lectures at Chestnut Lodge in Washington DC. Leston Havens called him the most important underground influence in American psychoanalysis. His ideas were collected and published posthumously, edited by Helen Swick Perry, who also published a detailed biography in 1982 (Perry, 1982, Psychiatrist of America). The following works are in Special Collections(MSA SC 5547)at the Maryland State Archives in Annapolis: Conceptions of Modern Psychiatry, Soundscriber Transcriptions (Feb. 1945-May 1945); Lectures 1-97 (begins Oct. 2, 1942); Georgetown University Medical School Lectures (1939); Personal Psychopathology (1929–1933); The Psychiatry of Character and its Deviations-undated notes.

Works

His writings include The Interpersonal Theory of Psychiatry (1953) ; "The Psychiatric Interview" (1954),Conceptions of Modern Psychiatry (1947/1966); and" Schizophrenia as a Human Process (1962). His book Personal Psychopathology (1933/1972) contains a chapter on "Male Adolescence" that has extensive data on the interaction of sexual practices, personality development, and societal strictures.

Parataxic distortion

Parataxic distortion is a psychiatric term first used by Harry S. Sullivan to explain the inclination to skew perceptions of others based on fantasy. The "distortion" is in the perception of others, based not on actual experience with the individual but from a
projected fantasy personality. For example: when one falls in love they can create an image of the person as the “perfect match” or “soul mate” only to find out later the person did not match the original perception. The fantasy personality is created in part from experience and from emotional stress. The stress of forming a new relationship or finding a life mate, where one contemplates reproduction, can be seen as stress, although it is perceived as pleasurable. “Falling in love” can create the atmosphere where parataxic distortion is primarily involved in the perception of the object of affection. It is possible in these situations for chemical influences to play a role in the “falling in love” process.

Taxic (the word is from the Greek παράταξις, "placement side by side") distortion also results when the therapist’s evaluation of the client is affected by past experiences, either clinical or in life. For example, a particular trait of a female client might remind the therapist of his or her own mother and therefore distort the perception of the individual. Parataxic distortion is very difficult to avoid completely, because of the nature of human learning and interaction. Media could also be a source of parataxic distortion, for example, stereotyping of a drug addict as having certain traits and personality components can have an impact on the clear assessment of a client with a history of substance abuse. This sort of stereotyping and classification of people in groups has a distorting effect on the clear perception of an individual.

Interpersonal relationships and emotions

The tendency to distort the perceptions one has of others can and generally interfere with interpersonal relationships. Humans are constantly and subconsciously stereotyping. According to Paul Martin Lester, "our brains naturally classify what we see, we can’t help but notice the differences in physical attributes between one person and another." Parataxic distortion run parallel to stereotyping while it remains in the subconscious. As we use our affect to make quick judgments, we are drawing from previous experiences that have been stored in our memory. When parataxic distortion occurs, it can be a positive emotion at first. Leading one to believe false expectations.

Attachment theory

Parataxic distortion can begin its stages of development as an infant. Infants have decent long-term memory (Developmental Psychology). They could relate their mother's personality of nurturing when they were a child to a girl they have found attractive later in life. This could build a stronger bond and connection because the girl is being positively reinforced by the positive attributes that child perceived from his mother. This example of attachment theory correlates with Parataxic Distortion.

It has been studied that adults are beginning to display attachment styles in romantic settings. This can lead to negative effects in a relationship. When someone decides on an image to associate another individual with, it is difficult to be detached from that thought. It is almost like having an addiction. Something that is psychologically or physically habit-forming. This can lead to anxiousness and insecurity. It can also lead to personality changes.
because they are so consumed by their relational life. People begin to adapt to the images they have created for other people.

Because some people see reproduction as a stressor, it can create a fantasy within someone’s head that someone is right for them. If a thirty year old is trying to find a partner to start a life with, and they are having no luck, then they might resort to parataxic distortion unconsciously to create an image that someone is perfect. They will see another person as they wish to see them instead of who that someone really is.

Based on past experiences, we can create a negative or positive image as we see other people. We are constantly meeting and interacting with new people and we make generalizations about that person and find common ground to relate with them. This can lead to parataxic distortion because they could draw from their memory bank that someone reminds them of a particular person. If they do not like the person they relate them to in their head then it will influence their judgment on whether or not they will like the person they are interacting with.

**Distorting the perceptions of others**

If someone just got a divorce and is starting to date other people and they come across someone that they are interested in. After getting to know the person they start making judgments and inferences that the new person has the same personality as their ex-wife. This could be either positive or negative depending on how the person wants to see it. They could be perceived as negative because the person and the ex-wife divorced; however, it could be seen in light because they were together for a long period of time so they know that they would hit it off.

**Negative Effects**

Dealing with current situations or current people that relate or remind someone of a past person or event can have negative effects on a human from an emotional standpoint. If the person or event from the past is a negative figure or has had negative influence a person can create a self-sense of identity for the new individual that they have met. The negative emotional response happens when the individual realizes that they have been creating a fake identity for the new individual. Parataxic distortion is most effective in the realm of interpersonal communication. Parataxic distortion is seen most with physiologists’ and dealing with past events. For example, if a child is mistreated by their father you are not only attaching the fear and anger towards the father the child will also relate this fear and anger to other men that physically look, talk or act like the father. The human mind keeps track of situations that we have encountered in the past to help us deal with future situations. The unconscious memory, without our knowing, helps us understand and deal with situations in the present that we have dealt with in the past. Parataxic distortion and our unconscious mind make us act the same way in current situations as we did in past without even realizing it.

**Defense mechanism**
When a person uses parataxic distortion as a defense mechanism it is to protect one from the feeling or consequences from a past event. These events are stored deep inside the brain and kept open to be drawn from if needed. A person may not even remember a certain event but will act a certain way to protect from an outcome with the use of parataxic distortion. The use of distortion at this level is always pathological and makes coping with reality possible for the individual. The grossly reshaping of reality in order to cope with internal struggles makes an individual seem irrational and insane to people of the outside world. Parataxic Distortion as a defense mechanism starts in childhood and continues through adulthood if not properly treated. The major problem with using this distortion as a defense mechanism is that the individual will create a non-realistic world that nobody can help with or understand.

**Interpersonal psychoanalysis**

Interpersonal psychoanalysis is based on the theories of Harry Stack Sullivan (1892–1949), an American psychiatrist, who believed that the details of a patient's interpersonal interactions with others can provide insight into the causes and cures of mental disorder.

**Selective inattention**

Sullivan proposed that patients could keep certain aspects or components of their interpersonal relationships out of their awareness by a psychological behavior described as selective inattention. The term has to a degree passed into common usage: "Selective inattention".

**Personifications**

Sullivan emphasized that psychotherapists' analyses should focus on patients' relationships and personal interactions to obtain knowledge of affecting patterns and tendencies - personifications. Such analyses would consist of detailed questioning regarding moment-to-moment personal interactions, even including those with the analyst himself.

For Sullivan, 'personifications embody one's assumptions, schemata, internalised representations of others and reflected appraisals of the self'. They can form the basis for 'the later ambiguities in interpersonal relations that Sullivan termed parataxic distortion...a very similar concept to the standard psychoanalytic transference/projection mechanisms'.

**Sullivan and the neo-Freudians**

'Like the other neo-Freudians that Sullivan worked with, he rejects the orthodox Freudian drive model, although he retains a variant of the pleasure principle'. Sullivan's interdisciplinary emphasis - linking him with 'psychiatrists, psychologists, social workers, counsellors and clergy. Horney, Fromm, Thompson and Fromm-Reichman were all associates' - was an important part of his enduring influence.
Criticism

The point has been made that Sullivan’s ‘need to separate himself from Freud was perhaps so great that he persistently invented new, often obtuse, terms for concepts already well expressed by Freud’.


The Interpersonal and Freudian Traditions: Convergences and Divergences

Robert S. White

The traditional Freudian and interpersonal schools of psychoanalysis diverged during the psychoanalytic wars in New York in the 1940s. Each has developed from a different set of assumptions concerning the mind, especially the role of structure and the role of interaction. Recent developments in both schools in the last twenty years suggest a convergence and overlap in theory and technique. The relevant history of the divergence is examined and the work of three contemporary interpersonal writers explored in depth. That work is contrasted with contemporary developments in traditional Freudian psychoanalysis.

Freud (1930) made an observation about group and cultural life that is a subtext of this essay: “The advantage which a comparatively small cultural group offers of allowing this [aggressive] instinct an outlet in the form of hostility against intruders is not to be despised. It is always possible to bind together a considerable number of people in love, so long as there are other people left over to receive the manifestations of their aggressiveness... I gave this phenomenon the name of ‘the narcissism of minor differences’” (p. 114).

With the benefit of hindsight, we might well apply this observation to the psychoanalytic wars in New York City in the early 1940s. What seemed to be huge differences at the time—about drives, about interaction, about structures of the mind—no longer seem so unbridgeable. Freud emphasized group cohesion as the advantageous aspect of the narcissism of minor differences, but we could equally well cite self-esteem and a lessened vulnerability to narcissistic injury. The psychoanalytic community in the 1940s was small and insecure in its professional status. Greenberg and Mitchell (1983) believe that interpersonalists and Freudsians coexisted in relative peace until the influx of newly arrived Europeans fleeing the war in Germany. There is no better way to create group solidarity than to form an idealized orthodoxy and expel the deviants.1 This, I believe, is one of the dynamics that caused Karen Horney to be expelled from the New York Psychoanalytic
Institute in 1941 and led eventually to the formation of the interpersonal school as distinct from, and hostile to, the Freudian tradition.

Perhaps today we are starting to emerge from this split. Freidians have developed an interest in interaction, and interpersonalists an interest in mental structures. The Freudian tradition has until very recently for the most part ignored the interpersonal tradition. Within the Freudian tradition, change in theory and practice has evolved out of internal splits and controversies. I believe it is the Kleinians who, while retaining a strong concept of internalized structure, introduced ideas of interaction into the transference concept. This theoretical shift occurred through their formulation of projective identification and the greater attention to countertransference that this entailed. Out of this then came the development of object relations thought and theories of intersubjectivity. Currently, intersubjective practitioners are quite comfortable with such ideas as the importance of here-and-now aspects of transference, the informational value of enactments, and the mutual influence between the analytic pair, all of which have long been accepted by the interpersonal tradition.

In contrast, those in the interpersonal tradition have always read the Freudian literature and debated and reacted against that tradition. Modern interpersonal thinking is a fusion of Sullivanian thought and European psychoanalysis as mediated by Ferenczi and Thompson. What the Kleinians did in England in the 1940s and did simultaneously and independently in the United States. While the interpersonal tradition has never entirely denied a concept of internalized structure, there is to be found in the works of Mitchell (1988b) and Greenberg (1993) a move toward theories regarding more highly differentiated internalized mental structure and intrapsychic conflict that overlap with the ideas of many contemporary Freudian writers.

I hope to show here that within each tradition there is at least as much difference and dissent as there is between traditions and that, moreover, there is now considerable overlap between the traditions. On the interpersonal side, Hirsch (1996, 1998) has come to the same conclusions. We are now seeing the beginning of a real exchange of ideas. There are journals now that solicit articles from both traditions, a CD-ROM that includes journals from both, and speakers who regularly cross the divide at national meetings. However, I do not believe that these changes have filtered down to the rank and file. Talking with colleagues, participating in seminars and case presentations, I find the narcissism of minor differences very much alive. Freidians tend to see interpersonalists as "sociological," concerned only with the surface, the individual as a passive vehicle for social norms. Interpersonalists tend to see Freidians as "distant mirrors," concerned only with the depths, the individual driven by tormented desires. Each side sets up a straw man to attack. Much of what Freidians say casually about interpersonalists is based on misperception, misinformation, and very little direct knowledge of what the interpersonal tradition really stands for.

It is this problem I wish to address. I propose to show that modern interpersonal theory and the various forms of relational psychoanalysis belong as much in the "big tent" of psychoanalysis as do traditional Freudian theory and its variants. In this postmodern era,
we generally agree that a unified theory is neither possible nor desirable; we are in an age of theoretical pluralism. At such times, however, there exists a tension between “lumpers” and “splitters.” I tend more toward inclusiveness and common ground, but one can also argue for vigorous demarcation among theories (Richards 1999). Should we move toward unification of theory or encourage theoretical struggle among competing theories? (This is another subtext of this essay.) If psychoanalysis is to remain viable and vital into the millennium, we must ensure a flow of critical ideas among theories.

I limit myself here to certain questions of technique and experience-near phenomena of transference and resistance. I am also interested in concepts of mental structure, especially as they bear on various concepts of transference. I will not address the question of drives, which remains a major area of difference but would require an essay in itself. Nor should the present essay be considered a complete review of interpersonal thinking in these areas. After a brief historical survey, I will focus on three current interpersonal thinkers, chosen because they have written extensively, have clear ideas about the subject matter under consideration, and have distinct and contrasting positions.

**Founders of the Interpersonal Tradition**

**Harry Stack Sullivan**

Harry Stack Sullivan (1953a, b) was a genuinely original thinker. Though influenced by psychoanalysis, he never considered himself a psychoanalyst. Unlike Freud, Sullivan came from a background that was impoverished, both financially and intellectually. Born and raised in rural poverty of immigrant parents (Perry 1982; Wolstein 1984), he drew his metaphors and conceptions from the Great Depression and the social support system of the Roosevelt administration.

Sullivan’s clinical work, primarily with hospitalized psychotic patients, began around 1920. Having no formal psychiatric training, he came instead from a background in institutional psychiatry. He named Sigmund Freud, Adolf Meyer, and William Alanson White as the strongest intellectual influences on his work (Sullivan 1953a). From Meyer he took a biosocial approach in which needs are seen as reflecting a biological reaction to life events and satisfactions a dynamic reaction. From White he took practical experience and mentorship. Working under White at St. Elizabeths Hospital in Washington, D.C., and later at the Shepard and Enoch Pratt Hospital near Baltimore, Sullivan attempted to apply psychoanalytic ideas to work with psychotic patients. The American emphasis on democratic values, direct experience, and tolerance are found in Sullivan’s emphasis on direct observation of clinical interactions. A belief in pluralism suggested that the choice of metaphor or metapsychology is a matter of individual choice, negotiated between the analytic pair. Sullivan was also strongly influenced by the philosophy of science of his time, which emphasized pragmatism and operationalism as antidotes to abstract theory lacking concrete or verifiable references. Sullivan emphasized clinical observation of behavior and experience (Mitchell 1988a).
I think that Freud’s and Sullivan’s choice of patients may in part account for their very different conceptions of transference. Freud, in turn-of-the-century Vienna, worked primarily with hysterical and obsessive neurotic patients, with whom repression was the primary defense and erotic fantasies were common. An interpretive stance toward intrapsychic structure by an autonomous analyst worked well with this population. The focus was on the distorting aspects of transference as a projection of internalized structure. Sullivan, by contrast, worked primarily with institutionalized psychotic patients, who could be treated only through a highly interactive approach that emphasized reality factors in the relationship. Sullivan was initially interested in Freud’s theory because it offered an alternative to Kraepelin’s formulation of schizophrenia as a progressive dementia. In fact, Sullivan introduced the term interpersonal as an alternative to Kraepelin’s concepts (Greenberg and Mitchell 1983). However, when Freud moved from seduction theory to libido theory, emphasizing the role of internally generated fantasy, Sullivan broke with him. In opposition to Freud, Sullivan became convinced that psychotic patients were capable of transference. They were in fact dominated by transference, he thought, and so had lost a sense of current reality. The problem for the doctor was not to interpret or encourage transference but to find a way to make the patient become aware of the doctor as a real person with a real relationship to the patient. Sullivan felt it important to convey respect to the patient and to maintain the patient’s self-esteem. Sullivan was also critical of Freud for postulating universal principles from limited data and narrow cultural contexts.

Whereas Freud’s conception of transference started with the centrality of internal structures, Sullivan’s was grounded in the interpersonal relationship. For Sullivan, according to Hirsch (1996), “The observer, by definition, interacts with and influences what is observed” (p. 359). This, I believe, is the major difference between Sullivanian and Freudian theory: the basic building block for Sullivan was interpersonal process and communication, while for Freud it was intrapsychic fantasy and motivation. For Sullivan, the concept of participant-observer can include fantasy and wishes expressed verbally, as well as behavior and direct communication. What it does not include are experiences incapable of being communicated and processes presumed to be unconscious. Sullivan called transference “parataxic distortion.” He wished to emphasize current interactions, their distortion, what functions the interactions serve in the present, and how they meet the needs of the individual (Thompson 1964b). Transference results in either selective avoidance of the interpersonal situation or a total dissociation in which there is no engagement. Experience of others is codetermined both by the current interpersonal relationship and by the internal personification of others, who are themselves residues of earlier interpersonal relationships. This has consequences for the conception of countertransference; the analyst does not notice or does not think about certain aspects of the patient (Levenson 1992a). Sullivan thus defines psychoanalysis as an intersubjective, two-person psychology.

Unconsciousness he describes as discontinuous gaps in experience that cannot be experienced directly. He warned against elaborate internal schemes to fill up this unconscious space. In his work, structures are called dynamisms, relatively enduring patterns of energy transformation. Internal structures are regarded as secondary phenomena, precipitates of the history of the interpersonal field. Because of Sullivan’s
emphasis on the interpersonal field, he deemphasized and so did not fully develop a concept of internal structures. He did, however, postulate two types of such structures (1995). The self-system is a specialized alarm system, designed to minimize social anxiety by the early detection of dangerous interpersonal situations. The self-system develops out of the infant’s need to control the mother’s anxiety through a complex set of processes. It is operational, the aspect of the self that deals with the outside world. Distortion is then understood as an attempt to maintain interpersonal relations while avoiding anxiety. Distortion either operates through a selective inattention to situations of anxiety or dissociation, experiences that do not register. Security is maintained by moving attention away from mental contents associated with anxiety and toward mental contents that feel safer and more secure.

The other internal structure is the representational, what Sullivan called the personification of the self. It consists of static, objectified constructs and meanings. Various personifications of “good me” and “bad me” allow for an embryonic theory of intrapsychic conflict (Greenberg and Mitchell 1983; Stern 1994), although Sullivan would have disavowed the idea. Conflict is possible between aspects of self-esteem and self-contempt, as well as between self-representations from the past and present-day operations. Sullivan also had a concept of personality traits, which he regarded as internal structures determining an individual’s susceptibility to a current interpersonal field. In this conception, personality is the sum of what one is, while the self is the conscious, self-aware aspect, what I think I am and what I will or will not notice about the world. Conflict is implicit in what is seen clearly and what is dissociated. Sullivan is more interested in what a person did or didn’t communicate than in what the person meant (Levenson 1972). It is interesting that Sullivan as a practicing therapist did not follow these principles (Hirsch 1996; Levenson 1992a; Summers 1994; Wolstein 1984). He tended to avoid examination of the patient’s experience of the analyst and saw the analyst as an expert in the observation of extratransference relationships. The countertransference was useful only as an aid to understanding the patient’s description of current and past relationships. Sullivan practiced a type of counter-projection (Summers 1994), actively confronting a patient’s projections with a more benign object relationship. It is ironic that in practice Freud was probably more “Sullivanian” in his level of activity than was Sullivan, who in fact practiced a more studied neutrality (Levenson 1992a). Wolstein (1971) points to a certain parallel in development between the classical Freudian and the interpersonal metapsychologies of psychoanalysis. Freud and Sullivan both emphasized a basic biological orientation, structures of defense, unconscious motivation, and adaptation to cultural norms. They differed on the metapsychology of drives. Freud was more interested in internal structure, while Sullivan was more interested in interactions. While Sullivan recognized the unconscious, he did not want to postulate unconscious structures and organization.

Clara Thompson

Clara Thompson was the most important of Sullivan’s immediate colleagues (Green 1964; Shapiro 1993). She did her medical training at John Hopkins and worked for a summer at St. Elizabeths under William Alanson White. She completed her psychiatric training at the
Phipps Clinic in Baltimore under Adolf Meyer. In 1923 she met Sullivan and began a lifelong friendship and collaboration. Sullivan had met Ferenczi in New York and in 1927 arranged for Thompson to meet him. Sullivan suggested to her that she be analyzed by Ferenczi abroad and then return to analyze him; she did both. She entered analysis with Ferenczi that year, first spending summers in Budapest and eventually moving there in 1931. She stayed until Ferenczi's death in 1933. In 1943, together with Sullivan, Fromm, Fromm-Reichmann, and the Riochs, she set up the New York branch of the Washington School of Psychoanalysis, with Thompson as executive director. The organization was later renamed the William Alanson White Institute. Thompson remained there as analyst, teacher, and administrator until her death in 1958.

The intellectual importance of transference to the interpersonal tradition stems from Thompson's link to Ferenczi and from Sullivan's concept of the participant-observer (Wolstein 1984). In the 1920s Rank and Ferenczi had begun to differentiate transferred aspects of the analytic relationship from its real and present aspects. The patient reacts to the analyst both transferentially and as a real person (Thompson 1964e). It is likely that these ideas, brought to Sullivan by Thompson, were a major influence on the concept of parataxic distortion. Ferenczi, a restless experimenter in psychoanalytic technique (Thompson 1964b), was at the time of his association with Thompson developing his relaxation technique. In the belief that a passive, nonreacting, and aloof analyst often repeated the patient's childhood trauma, he encouraged an emotional reliving, in the analytic relationship, of early traumatic experience. He sought to achieve this through the use of several techniques. The analyst must be sincere about blind spots and openly admit mistakes; must be drawn into and actively participate in the fantasies of the patient; and genuinely give the love that is needed by the patient, as both an undoing of the traumatic past and the creation of a new reality. At this same time, Ferenczi was participating with one patient in what he called mutual analysis (see Fortune 1993). This consisted of periods in the analysis when roles were reversed and the patient analyzed the analyst. The case was well known both to Freud and to Thompson. The mutual analysis did not go well, partly because Ferenczi became emotionally overinvolved and partly because he was severely ill with pernicious anemia, dying just after the analysis ended.

Modern Sullivanian interpersonal psychoanalysis is, as I have suggested, a merger of Sullivan's pragmatism and European psychoanalytic thought, transmitted primarily through Ferenczi and Thompson. What precisely did Ferenczi and Thompson bring to interpersonal psychoanalysis? They certainly emphasized the centrality of the transference relationship as a therapeutic process. There was a greater emphasis on the here-and-now aspects of transference and of the real aspects of the relationship. Thompson (1964c) felt that the analyst needs to be natural and spontaneous, as each patient-analyst pair is unique. The analyst brings his or her total life experience to play in the analysis and is at times pulled into mutual acting out because of blind spots. The possibility of genuine reactions between patient and analyst can be important therapeutically. Thompson (1964a) differentiated between countertransference as an index of the state of the relationship and as an interference to the relationship. Counter-transference represents irrational aspects of the analyst, arising from transference aspects of his or her personality or from current emotional difficulties. In opposition to the Freudian thinking of the day, she
acknowledged countertransference as inevitable and advocated both acceptance and awareness. It also seems likely that Thompson reacted against some of the practices of Ferenczi, thereby contributing to a certain conservatism in her generation. She felt he went too far in telling patients of his own difficulties. She felt he mistook love demanded for love needed and avoided the repressed hostility behind the demand. She did feel it helpful to have a vivid emotional experience in the analysis, but she thought the analyst should not actively enter into the fantasies of the patient. She was critical of the idea of mutual analysis (Thompson 1964b). In practice, she was willing to encourage a patient’s exploration of her countertransference but did not openly acknowledge counter-transference issues or confirm a patient’s hypotheses regarding them (Shapiro 1993). Wolstein (unpublished interview), however, reported that Thompson, in his analysis with her, was open about countertransference issues that intersected with his.

**Second-Generation Interpersonalists**

**Benjamin Wolstein**

A group of “second-generation” analysts, closely aligned personally and professionally with Sullivan, advanced the theory of interpersonal psychoanalysis. Benjamin Wolstein, an analyst who wrote actively from the early 1950s until his death in 1998, understood the current interactional relationship between analyst and patient as the starting point of psychoanalysis. He defined transference as the “integrative and unitary phenomena of the total personality in the active field of experience” (1959, pp. 18-19). Clinically, Wolstein differentiated distorted transference from genuine transference. Anxiety is a signal of conflict between the two participants in the current interaction. In the distorted transference, the patient (or the analyst), in order to maintain relatedness in the face of anxiety, reaches for older and established patterns of relatedness. To the extent that preexisting patterns of interaction are unconscious, the self is distorted. This leads to a distortion of the analyst by a projection of the distorted self, casting the analyst into a reciprocal role (Wolstein 1964). The distorted transference avoids and denies the possibility of novelty in the current interactional field. In the genuine transference, distortion may represent a reaction to the analyst’s personality, which can evoke specific manifest forms of the patient’s transference. The central aim of psychoanalysis “is to reconstruct underdeveloped and unintegrated modes of relatedness through the study of their distortive impact on the self” (1964, p. 180).

Wolstein (1964) viewed resistance as a function of transference: “resistance and transference ... in operation are two sides of the same coin ... appearing first one way and then the other in response to the emergent structure of the therapeutic inquiry” (p. 40). Genuine resistance is a valid perception of the analyst that does not coincide with the analyst’s view of him- or herself. A distorted resistance involves a projection of the patient’s distorted self. Wolstein warned that the urge to conquer resistance by the analyst is actually a countertransference need. Resistance should not be interpreted but should instead be understood through detailed inquiry into its patterning (unpublished interview).
Countertransference was conceptualized by Wolstein (1959, 1975) as interchangeable with transference: “the two co-participants can treat transference and countertransference within a coequal frame of reference and within a shared field of experience and inquiry” (1975, p. 77). The study of unconscious aspects of the transference is conducted by the psychoanalyst, since these aspects are beyond the patient’s awareness. Likewise, unconscious aspects of the counter-transference are often first seen by the patient. Collusions arise from a deep interlocking of transference and countertransference, beyond the awareness of either party (unpublished interview). Wolstein (1975, 1994) argued for a radical mutuality between the two participants in the relationship. Both patient and analyst bring their own transference and resistance into the interaction. There is no epistemological difference between transference and countertransference, or between resistance and counterresistance. The analyst is privileged in the interaction only to the extent that, by training or experience, he or she may be more aware of distortions as they arise. If the analyst uses only his or her professional facade, only the patient’s defenses will be engaged. The analyst must be willing to share the uniqueness of his or her psyche openly with the patient. At a deep level, the patient will respond only to something real in the here and now. Wolstein believed that as the analysis proceeds there is a movement toward genuine mutuality of patient and analyst. He believed that analyst and patient function as symmetrical coparticipants, sharing their equally privileged observations. This leads to an ideal of symmetrical involvement and symmetrical self-awareness: “the terms therapist and patient are, finally,” writes Wolstein (1994), “interchangeable without reservation” (p. 473). The analyst is distinguishable from the patient only through having greater initial experience in self-awareness: “the psychic sufferer who is searching for greater self-knowledge I term the patient, and the psychic sufferer who has already reached it the therapist” (p. 473). Each participant is free to study, interpret, and define the other. Both participants are participant observers and observed participants. The enlargement of the patient’s awareness is accompanied by enlargements in the analyst’s awareness and indeed is dependent on the analyst’s being open to such changes. The analyst can receive and accept new descriptions of self. Wolstein believed that genuine change in the patient is possible only when the analyst is open and able to change his or her own self-awareness.

**Edgar Levenson**

Edgar Levenson has been referred to by Greenberg (1987) as a “gadfly,” a radical critic wanting to take apart tradition and develop a unique vision. Levenson (1972) believes that psychoanalysis has moved on to a new paradigm, from the information-processing metaphors of Sullivan and Wolstein to a model of complex synaptical connections, an organismic paradigm. Levenson aims to push the Sullivanian participant observer concept toward the pure inter-personal. Psychic truth lies in a complex network of relationships and a world of constantly shifting patterns. Psychoanalysis is an inquiry into a private aesthetic experience, what happens between the analytic dyad, which, in turn, is grounded in familial and social systems. Later in his writings, Levenson (1979; see also Stern 1994, 1995) describes psychoanalysis as applied semiotics. Semiotics is the study of systems of signs.
Everything that happens between patient and analyst, according to Levenson, can be understood as a pattern of signs embedded in familial and cultural systems. Patient and analyst must jointly develop an understanding of the entanglement they find themselves in, as a reflection of the larger semiotic system.

Levenson understands language as a subsystem of semiotics. Language is only one aspect of the extensive coded communication that occurs between patient and analyst. But language is also a type of behavior; what is said to the patient is also an action with the patient. Likewise, all behavior is coded like a language. Language, for Levenson, is a structural concept. Experience is coded and carried by language. Language in turn structures subsequent experience and a sense of self. Beyond its basis in language, however, Levenson (1989) is profoundly ambivalent about concepts of the self. He thinks of intrapsychic structure as a precipitate of interpersonal experience. Intrapsychic structure is a “black box,” not directly observable and thus not a useful concept for clinical psychoanalysis (1992b). The internal is lived out in the interpersonal. The interpersonal involves the pragmatic skill to function in the world, to manipulate the social context, and to minimize anxiety. Levenson (1989) defines the self in interpersonal terms as a network of strategies of dealing with the perceived dangers of the world. Like Sullivan’s self-system, the self is a system of warning processes designed to minimize interpersonal anxiety. The self is the part of the mind that negotiates reality. Levenson thinks of self as a process rather than as a structure. Fantasy thus becomes an attempt to understand the intersubjective context. The matrix of events lived as a child lives on in the social present and in the analysis.

Levenson believes that though theories of psychoanalysis will change, its practice will remain a constant (Greenberg 1987). He describes a basic sequence of psychoanalytic process. The process is set up by a frame that the analyst initiates (Levenson 1995a). At the outset of treatment, the analyst helps the patient sort out motivations, goals, and expectations. The limits of the analyst’s possibilities, commitment, interest, and competence must also be sorted out. The two participants establish a pace of working together. The frame is an ideal, a safe place from which to wander and make errors, which can then be used for learning (1992b).

The psychoanalytic process is often initiated by detailed inquiry. This technique originated with Sullivan and consists of an active questioning of the patient’s characteristic relationships, with the analyst or with someone else in the patient’s life. Sullivan, in the belief that conflicts are not repressed but rather go selectively “inattended,” thought that skillful questioning could bring these conflicts into awareness. Levenson agrees with Sullivan but takes the detailed inquiry further (1972, 1989, 1991b). Like Sullivan, he is looking for blind spots, what goes selectively inattended or is dissociated by the patient in the here and now. He is interested in the reality of what is happening between patient and analyst. Levenson is always asking about what goes inattended. The analyst finds patterns of immediate experience unique to each patient. Descriptions are preferred over interpretation and persuasion (Hirsch 1992). This forcing of the data opens up the text and leads to a deconstruction, as the patient’s prepared text becomes fragmented. A breakdown occurs in the narrative order, a temporary chaos of meaning. Levenson believes that his
kind of detailed inquiry is a technique parallel to free association, and that both can accomplish the same thing.

The idea of mystification is central to Levenson (Hirsch 1992). The patient makes an unconscious agreement to selectively ignore painful aspects of relationships with important others, setting up repetitive patterns of conflicted relationships. Anxiety follows mystification and then, provoked by the deconstruction, causes resistance. Levenson (1991a) defines resistance as a manipulation of the interpersonal context to minimize anxiety or a create relationship that precludes awareness of anxiety. Thus, resistance is precipitated by attempts at interpretation. In such attempts, the analyst inevitably becomes a participant in the action and joins the resistance.

Because of heightened anxieties, according to Levenson (1972), the patient attempts to pull the analyst into the action as a participant. This is a continuous unconscious process present in all relationships. All communication, whether in language, fantasy, memories, or dreams, has a semiotic dimension (Levenson 1992b, 1995b). Transference is an isomorphic replay in action with the analyst of the content under discussion. Whatever the patient is talking about is simultaneously being enacted between patient and analyst. The form stays constant in spite of the changing context. Transference is the actual and real relationship in the here and now. Levenson maintains that transference is neither a projection nor a fantasy distortion. He is an empiricist, profoundly skeptical of anything beyond observed behavior. Transference involves mystification whereby aspects of the real relationship are selectively ignored. The analyst’s countertransference is what the analyst does not attend to in the relationship (1992b). Countertransference is authentic, ubiquitous, and inevitable.

The analyst is drawn into a highly intensified replay, leading to a direct confrontation of transference and countertransference (Levenson 1991c). The pull from the patient transforms the analyst’s efforts to be objective into an enactment. The analyst inevitably becomes part of the isomorphic transformations of the patient (Levenson 1972). It is important that the analyst stay in an unpremeditated and extended participation with the patient, immersed and trapped in the material (Levenson 1972, 1991b). The analyst will be pulled into “errors,” a countertransference-induced wandering from ideal technique. He or she will be alerted to “errors” by anxiety, enactments, failure to inquire, or direct confrontation by the patient (Levenson 1992b). Both analyst and patient should be open to surprise. After the enactment has been played out in large measure, the analyst attempts to resist the transformation and engulfment that the patient desires. It is the ability of the analyst to resist the transformation and escape the entrapment that leads to meaningful insight and change. The analyst does not interpret meaning but does point out the pattern of relationships as it develops. If the analyst can both participate in the isomorphic transformation and yet resist it, a shift in experience will eventually occur and new experiences will become possible. The analyst’s “errors” can be used creatively. Once the analyst is aware of his or her “error,” there is already a shift in experience. The analyst may correct the “error” without being explicit, may play with the “error,” or may decide to tell the patient, assuming the patient usually knows already (Levenson 1992b).
Therapeutic change comes about not through interpretation or explanation but through the disequilibrium created by the analyst’s living through the transformation and then articulating the experience. This forces a new equilibrium, in which new and different experience is possible. Levenson believes that the patient’s world is changed by the analyst’s authentic engagement in this world. Working through involves the increasing awareness of the isomorphic patterns in the transference, cycling into parallel patterns of relationships in the present and the past. The goal of psychoanalysis is the development of instrumental skills to see experience more clearly.

Jay Greenberg

Jay Greeberg is a different kind of interpersonal psychoanalyst. He finds the dual drive theory useful, though not the traditional division into libido and aggression. Internal psychic structure is for him a central organizing function in the mind, though not conceived in traditional terms of id, ego, and superego. Greenberg struggles not with Sullivan and his followers, but with Freud, Hartmann, and Rapaport, and finds common ground with Fairbairn, Kohut, George Klein, Schafer, and Sandler.

For Greenberg (1991b), the mind is a representational world, a container of ideas. Lived events are stored as representations associated with specific affective states. All self- and object representations are shaped by both internal feeling states and external social influences. Over time, a repeated lived event can be associated with a variety of affects or environmental changes, leading to differing self-states. A key concept is re-representation. In evoking a memory, the observing self is shaped by the dominant self-representations and feeling states of the moment of the memory. Self-representations change over time, influenced by maturation, bodily states, and changing relationships with significant others. The observed self is an earlier version of self-representations, with a different shape. There is a wide range of possible re-representations of the same evoked memory, all contained in the representational world. Greenberg believes that re-representations are inevitably triangular; the current observing self has fantasies both about the earlier observed self and the earlier object. Re-representations are constantly being generated by developmental changes, changes in relatedness, changes in attitude, etc. Conscious and preconscious experiences are continually recast by repression of earlier representations and re-representations. Psychic conflict is caused by discrepancies among self-representations. There is a dominant set of ideas about the self, and self-representations that threaten this dominance cause anxiety and are repressed. Repression preserves the self’s integrity by preserving and isolating a particular set of ideas.

Greenberg understands that the patient starts off with the belief that the analyst is at least similar, if not identical, to the dangerous archaic objects of early experience. This belief is reinforced by the analyst’s role as a participant observer, in which the analyst is drawn in as an active object for the patient. Yet the analyst must do something to differentiate him- or herself from the old objects of the patient. This can be achieved through the establishment of safety. But if the analyst is experienced as too safe and too allied with the dominant self-representations, evocation of the repressed transference is inhibited. Thus, the neutral
an analyst tries to occupy a position that maintains an optimal tension between opposing tendencies in the patient to see the analyst a safe object and as a dangerous object. The patient is encouraged to see the analyst as a new and safer object through a mixture of the analyst’s emotional reserve and an openness tailored to the needs of the patient. The patient is encouraged to experience the old archaic objects through interpretations offered by the analyst.

Greenberg believes that psychoanalysis should concentrate on transferences of conviction. These are deeply personal constructions concerning the patient’s beliefs about the analyst and reflect a compromise formation among wish, need, memory, and perception. Transference is a compromise formation that includes both the patient’s fantasy about the analyst and the patient’s perception of the analyst. Transference is a construction that is neither pure imagination nor a pure rendering of reality. It is illusion, a mistaken conviction. Transference reflects the multilayered re-representations of the patient’s impression of the analyst. New transference paradigms emerge over time during the analysis. Each transference reveals different convictions about the analyst. These convictions do not disappear or get resolved, but instead add complexity to the patient’s understanding of the analyst. The analyst’s aim is to facilitate the emergence of a greater range of representations into consciousness. In interpretation, the analyst tries to articulate the emerging representations.

An added complexity of interpretation is seen when we conceptualize the analytic situation as embedded in an interactive matrix (Greenberg 1995). From this point of view, when patient and analyst are concordant—that is, when their sensibilities match—there is no conflict between them and the need for interpretation does not arise. These moments pass silently and comfortably, with neither party noticing. When patient and analyst are discordant—that is, when their sensibilities do not mesh—anxiety and tension are felt in one or both parties. This might result in unconscious negotiation and mutual adjustment, or in conscious tension. Only in the latter instance does interpretation become possible and indeed necessary. The interpretation itself becomes a meaning negotiated between the parties.

From another point of view, transference can be understood as an action (Greenberg 1996). Everything said or done in the analytic situation is reflective of a desire in each participant to influence the other. Nonaction is not possible; we can speak only of different types of interaction. Actions by the patient, actualizations of representations of archaic structuralized interactions, are powerful forms of information if the patient does not get stuck in them.

During points of transition between transference paradigms, the patient will feel greater anxiety, and resistance will be evident. Resistance can be motivated by shameful or guilty feelings in the self or by the need to protect the analyst. Greenberg thinks of countertransference as the analyst’s potential vulnerability to the patient’s convictions, the tendency of the analyst to be self-protective by using interpretation to deny the patient’s perceptions. If the patient, fearing that he or she can destroy or threaten the analyst with his or her convictions, the analyst may experience the patient as resistant.
Countertransference could be understood in this context as a blind spot, as the analyst’s not wanting to see what the patient notices (Greenberg 1991a). Greenberg believes that it is important to appreciate the plausibility of the patient’s perceptions and convictions.

Discussion

From these three interpersonal writers, I will select four concepts for extended discussion and comparison with the Freudian position. The first concept is the difference between interpersonal and Freudian traditions concerning defense. Repression, a prototypical defense, is defined in the Freudian tradition as a process by which an idea is excluded from consciousness when it is in conflict with another idea or set of ideas. Freud postulated several types of repression, presented here in chronological order of their appearance in his work. Repression motivated to protect the integrity and security of the self. This type of repression results in the exclusion of a single idea incompatible with the mass of ideas dominating the conscious sense of self (Breuer and Freud 1895).

Primal repression. This is the establishment of fixation points during childhood before secondary process is organized. The motivation for primal repression is avoidance of unpleasurable stimuli or painful overstimulation of the immature psychic apparatus. Primal repression renders emotionally charged ideas in the adult subject to repression proper by exerting an attractive pull on these ideas (Freud 1915).

Repression proper. This is initiated by signal anxiety against a dangerous id impulse or associated charged idea. In the topographic model, a repression barrier is postulated between the system preconscious and the system unconscious. In the structural model, repression occurs at the junction of ego and id. Repression is maintained either by a continuous force of countercathexed energy or by a pull toward regression to less organized mental states (Freud 1926).

The current Freudian model of repression would include both primal repression and repression proper. Repression is always an internal defense directed against other internal ideas or impulses.

Levenson, who articulates a purely interactional concept of defense, builds on the Sullivanian idea of security operations. One function of these operations is to distract attention from external points of anxiety and dissociating them from awareness, often aided by internal fantasies of power and specialness of the self. This Sullivanian concept seems very close to Anna Freud’s concept of denial (1936), which she described as a primitive defense mechanism by which a child avoids awareness of a painful aspect of reality, frequently substituting a powerful fantasy or taking avoidant action. Denial has come to be used to refer to both minor and major selective distortions of external reality. Denial for Anna Freud is a bridge concept containing both intrapsychic and interpersonal components.
Levenson isn't much interested in the intrapsychic aspects of defense. He understands fantasy to be a secondary phenomenon, a retrospective attempt to understand events associated with anxiety. For Levenson, the primary defense is mystification, a selective inattention to aspects of real experience that have been damaging or threatening to security. Levenson understands that the patient has constructed an idiosyncratic reality that must be demystified by direct engagement. But Levenson, I think, has made a selective reading of the concept of denial. He downplays and wants to ignore the internal fantasy constructions that are both a reaction to real external pain and a carrier of anxiety. Mystification for Levenson is solely an interpersonal process.

Greenberg, by contrast, understands repression as a basic defense that controls access to consciousness of both internal and external contents. Following G. Klein (1976) and Dorpat (1983), he views denial and repression as unified reactive defenses, avoiding awareness both of painful aspects of reality (through inhibition of focal attention) and of painful affects such as anxiety, guilt, and depression. Denial is accompanied by countering defenses, such as projection, or countering fantasies, an internal attack on the painful object representation. Screen behaviors, affects, or perceptions often fill in the gaps. Greenberg draws on Freud's first theory of repression; that is, a self-representation is repressed if it is incompatible with the current and dominant self-image, thereby maintaining the integrity of the self. Klein (1976) suggests that it is not consciousness that is repressed but the meaning of an idea, impulse, or perception. The uncomprehended meaning can be active in consciousness as a substitute gratification. These products of repression are not subject to corrective feedback, since they are not comprehended, and thus lead to repetitive behaviors. This points to a way to integrate Levenson's concept of mystification, which is a description of the resulting behavior, with an underlying mechanism of mind as postulated by Klein and Greenberg. However, the concepts of mystification and repression really describe different domains of action, either that between persons or that within the mind.

The second concept to be discussed is Wolstein's emphasis on the absolute mutuality of the analytic relationship and the epistemological equality of the two participants. His idea that the transference of each party must be worked out within the other party is radical and provocative. I believe that he is one of the first psychoanalytic writers to stress this aspect of transference. Wolstein's concept foreshadows a current debate within the Freudian tradition. One side of this debate would essentially agree with Wolstein. Loewald (1986) suggested that the analyst’s countertransference is actually composed of a transference of the analyst and a reaction to the projected transference of the patient. The patient has a similar transference and countertransference to the analyst. Racker (1968) elaborated a similar complexity of countertransference. Both of these concepts move away from the analyst as blank screen and toward a mutuality of transference and countertransference in both parties (Hoffman 1983). Such ideas as the real relationship, the working alliance (Greenson 1967), and the therapeutic alliance (Zetzel 1970) also move toward equality of the relationship. Contemporary Freudian concepts such as the subjectivity of the analyst (Jacobs 1991; Renik 1993; Hoffman 1994; White 1996), countertransference enactments (Boesky 1982; Jacobs 1991; McLaughlin 1991; White 1996), and role-responsiveness (Sandler 1976) all emphasize mutuality in the relationship. Recent discussion of
disclosures by the analyst (Renik 1995; Aron 1996; Jacobs 1999) speaks to more permissive ideas about equality. However, in contradiction to this movement toward epistemological mutuality and equality, all of the Freudian and most of the interpersonal writers would agree that the analytic relationship must in practice remain asymmetrical (Aron 1996). There must be a difference in power and disclosure between the two participants that is essential in maintaining a focus on the patient’s conflicts and in highlighting the patient’s resistances and transferences. Without this power differential, it is likely that resistances will remain unconscious; without relative autonomy, the analyst’s countertransference may intrude into the patient’s transference space. It is not clear whether Wolstein was writing about only the first aspect, the asymmetrical power relation, or felt that there could be an absolute clinical symmetry. His idealized view that analyst and patient are interchangeable seems to suggest the latter. His writing is so densely theoretical that it is hard to tell how he practiced clinically. The ultimate endpoint of such a clinical equality would be Ferenczi’s mutual analysis. I think that in the examination of transference, we can see both mutuality and asymmetry at work. The mutuality pushes toward transference as real experience and real interaction in the here and now, providing its affective power. The asymmetry pushes toward transference as fantasy and as self-experience, both from the past. I see a dialectic between the two forces, an essential tension to be experienced and understood.

The third concept for discussion is Greenberg’s idea of re-representation, in which the mind is seen as made up of layers of evoked memories and re-representations. This concept both builds on object relations theory and makes an original contribution. Jacobson (1964) first formulated the idea of a differentiation of self- and object representations within the ego. She linked object relations, affect differentiation, and the vicissitudes of early instinctual development (Kernberg 1979). Kernberg (1982, 1988), building on Jacobson’s work, emphasized that affect structures serve to link behavior with intrapsychic structure. Two parallel series, of gratifying and frustrating experiences, influence the development of “good” and “bad” self- and object representations. Kernberg postulates that the basic unit of psychic structure is a self-representation, an object representation, and an affect linking them. Both impulse and defense are reflected in the fantasied relationship between self and object. Sandler and Rosenblatt (1982) extended Kernberg’s concepts by pointing out that self- and object representations at any one moment are shaped by pressures from the id, requirements of the external world, and demands by introjects. Every wish involves a self-representation, an object representation, and a representation of the interaction between them. The fantasy interaction includes both a wished-for interaction and a wished-for response. Greenberg suggests a complex layering of such self- and object-representations, colored over time by different affect states in the mind. Self-representations are made up of several versions of the same evoked memory, each shaped by developmental and affect influences at different time periods. This adds the dimension of time to the concepts of Kernberg and Sandler. Then Greenberg adds another original idea. He suggests that self-representations can be triangular; the current observing self relates to earlier versions of self- and object representations. Here Greenberg is in dialogue with a body of thought in the Freudian literature, extending it in an original way.
The fourth concept to discuss is Levenson’s emphasis on isomorphic transformation and the pull into action and interaction. Hirsch (1998), from the interpersonal tradition, has suggested a theoretical convergence between concepts of countertransference enactment and interpersonal interaction. How does one understand enactment along a continuum from intermittent to continuous, from avoidable to inevitable, or from interfering to useful? Levenson, Greenberg, and the Freudian intersubjectivists would all understand them as potentially useful. Jacobs (1991), for example, would tend to see enactments as a frequent occurrence and very useful, but not continuous. He includes, on a continuum of enactments, both “overt and rather obvious actions” (p. 141) and “scarcely visible countertransference reactions, so easily rationalized as part of our standard operating procedures” (p. 156). The tendency toward actions and enactments can be contained through silent countertransference awareness and self-analysis. I believe that many Freudian analysts would agree with Jacobs. By contrast, Levenson, Greenberg, and a number of intersubjectivists would argue that enactments are continuous and inevitable.

For example, Renik (1993) states that “we always see that an analyst’s awareness of a personal motivation in the clinical situation has its origins in self-observation of a behavioral manifestation ... of that motivation” (p. 557). Countertransference cannot be contained through self-analysis and becomes conscious only after action. This notion is identical to Levenson’s concept of isomorphic transformation whereby action and thought coexist as simultaneous modes. I believe that Levenson’s idea of being pulled into, immersed, and trapped in the patient’s isomorphic transformation is similar to Sandler’s idea of role-responsiveness (1976). Levenson would emphasize the need to remain trapped in the patient’s world for an extended period, to a greater degree than most intersubjectivists would advocate. Though I consider Levenson’s clinical descriptions of interaction compelling, I believe that action must be integrated with thinking. Levenson’s idea that what is being thought about is simultaneously enacted is innovative. However, his emphasis on action as mutative runs counter to the views of many interpersonalists and most traditional Freudsians. My own concept of actualization from intrapsychic to intersubjective modes (White 1996) also emphasizes the continuous interplay of thought and action. Greenberg (1996) states that patient and analyst are continuously trying to influence each other into action. Conceptions about the analyst’s subjective influence would fall along similar lines. Jacobs would understand the analyst’s influence as fluctuating, depending on the clinical state of both the analyst and the interaction, while the other three writers would see the analyst’s influence as continuous and ever present.

Is there an interplay between what goes on within minds and what goes on between minds? One way this is spoken of clinically is the relation of distortion and mystification to the concept of transference. I believe that most Freudian analysts would agree that distortion is a hallmark of transference that must be carried by some internalized aspect of mind. There is, however, debate over where the distortion originates and how to characterize it. Jacobs (1991), I believe, speaks for many Freudsians: “transference is not viewed as a one-way street consisting solely of projections of the patient, but as being continually influenced in the way it expresses itself by contributions from the analyst” (p. 222). Transference originates within the mind and becomes evident as a projection, but the content of the projection can be influenced by the person who is the object of the projection, what Gabbard (1995) calls a hook. Renik (1993, 1995, 1996) would agree with
Jacobs but sees the analyst’s influence on the projected transference to be more powerful and compelling. As for Levenson, he sees transference as primarily a mystification of communication, a struggle over perception. Transference originates as a disordered communication that can be internalized and therefore leads to repetitive miscommunication. However, while Levenson will admit that repeti-tive mystification must be carried by a structuralized mind that can fantasize and project, he is not at all interested in such a structure and considers it irrelevant to treatment. Greenberg is somewhere in the middle, similar to Renik, viewing transference as a mixture of projection and perception but giving greater weight to perception. The same fault line appears in discussions of how interactions further the process of analysis. Chused (1991) puts it particularly well for the Freudian tradition by characterizing enactments as “informational experiences” that lead back to insights about how the mind operates. My own concept of transformation from the interpersonal to the intrapsychic (White 1996) is similar. Gill (1996) makes the same point in emphasizing that both the innate and the experiential are represented intrapsychically. He suggests that the interpersonal tradition often confuses actual interaction with representations of interactions. Levenson argues for a mutative interaction in which psychic change results solely from the analyst’s ability both to be pulled and to resist being pulled into the patient’s psychic world. What happens inside the mind is not observable and so is not important. Greenberg’s concept of interpretation as negotiation (1996) is much closer to the Freudian tradition: “interpretation emerges as one form of negotiation.... successful interpretation not only facilitates the patient’s awareness of previously rejected thoughts and feelings, they also heal and deepen the analytic relationship” (p. 20). I would argue for a concept of transference that promotes both distortion and mystification. There is always a projection, by both of patient and analyst, that contains distortion, and inevitably an interpersonal struggle over perception. I have argued (White 1966) that intrapsychic and intersubjective aspects of transference are mirror images and are always, in any interaction, simultaneously present. Levenson’s ideal of isomorphic transformation makes the same point.

Among all the writers cited, there is remarkable agreement of the clinical description of a useful unit of interaction. They all describe a dialectic between being pulled into the experience of the enactment and the ability to reflect with the patient about the enactment. Jacobs (1991) stresses the realization by the analyst of being caught up in an unintended action, the analyst’s silent attempts to understand his or her contribution to the enactment, and how he or she uses that participation to understand and communicate the patient’s motivations. Renik (1996) has a more assertive style, actively entering the enactment by consciously taking sides and then reflecting with the patient about the interaction. Levenson, like Jacobs, is pulled into the enactment but is more willing to remain immersed in it for extended periods, to deepen the emotional conflicts, and only slowly to work out of it. Greenberg describes an alternation between concordant moments that pass unnoticed and discordant moments that raise tension. There is a similar movement of being pulled into discordant states and negotiating one’s way out.

Conclusion
Where does this leave us? I hope to have shown that the Freudian and the interpersonal traditions are both in the domain of psychoanalysis. What we need at this point is a dialectic, a dialogue between traditions that can enrich both. I have suggested the beginning of such a dialogue in this essay. It is clear that traditional Freudian psychoanalysis has a starting point very different from that of interpersonal psychoanalysis. Both approaches describe the same entity, the mind, but from opposite directions. They start with different assumptions and use a different technical language. If we agree that multiple points of view in describing the mind are both possible and useful, then the interpersonal point of view should be welcome. To the degree that the two traditions describe the same processes, convergences are possible. There are two types of convergences. Both traditions may discover and describe a similar phenomenon, either assigning it different names or coming at it from different directions. One example discussed above is the similarity of Levenson's isomorphic transformation and the idea of countertransference enactments. Over time, the difference in the details between the two concepts may tend to disappear. Another sort of convergence occurs when one tradition contributes to the other tradition, extending or enriching it. An example discussed above is Greenberg's concept of re-representation, which adds the layer of time to existing object relations theory. At the same time, we need to recognize and struggle with genuine divergences, where the two traditions with their different assumptions and starting points describe something uniquely present in their point of view. An example discussed above is Levenson's technique of remaining largely in the interaction and seeing the resolution of interpersonal tension as therapeutic. This contrasts with the Freudian emphasis on translating action modes into verbally symbolic modes for resolution (White 1996; Katz 1998). Only with such a tension and critical debate will psychoanalysis move beyond orthodoxy and continue as a genuine intellectual force.

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Lev Vygotsky: Cultural Historical Perspective

Lev Semyonovich Vygotsky (Russian: Лев Семёнович Выготский or Выготский, born Lev Simyonovich Vygodsky; November 17 [O.S. November 5] 1896 – June 11, 1934) was a Soviet psychologist, the founder of cultural-historical psychology, and the leader of the Vygotsky Circle.

Biography

Vygotsky was born in Orsha, in the Russian Empire (today in Belarus) into a nonreligious Jewish family. He was influenced by his cousin, David Vygotsky. He graduated from Moscow State University in 1917. In the mid-1920s, he worked at the Institute of Psychology and other educational, research, and clinical institutions in Moscow, Leningrad, and Kharkov where he extensively investigated ideas about cognitive development. He died in 1934, at the age of 37, in Moscow of tuberculosis.
Work

A pioneering psychologist, Vygotsky was also a highly prolific author: his major works span 6 volumes, written over roughly 10 years, from his Psychology of Art (1925) to Thought and Language [or Thinking and Speech] (1934). Vygotsky’s interests in the fields of developmental psychology, child development, and education were extremely diverse. The philosophical framework he provided includes not only insightful interpretations about the cognitive role of tools of mediation, but also the re-interpretation of well-known concepts in psychology such as the notion of internalization of knowledge. Vygotsky introduced the notion of zone of proximal development, an innovative metaphor capable of describing not the actual, but the potential of human cognitive development. His work covered such diverse topics as the origin and the psychology of art, development of higher mental functions, philosophy of science and methodology of psychological research, the relation between learning and human development, concept formation, interrelation between language and thought development, play as a psychological phenomenon, the study of learning disabilities, and abnormal human development (aka defectology).

Cultural mediation and internalization

Vygotsky investigated child development and how this was guided by the role of culture and interpersonal communication. Vygotsky observed how higher mental functions developed historically within particular cultural groups, as well as individually through social interactions with significant people in a child’s life, particularly parents, but also other adults. Through these interactions, a child came to learn the habits of mind of her/his culture, including speech patterns, written language, and other symbolic knowledge through which the child derives meaning and which affected a child’s construction of her/his knowledge. This key premise of Vygotskian psychology is often referred to as cultural mediation. The specific knowledge gained by children through these interactions also represented the shared knowledge of a culture. This process is known as internalization.

Internalization can be understood in one respect as “knowing how”. For example, riding a bicycle or pouring a cup of milk are tools of the society and initially outside and beyond the child. The mastery of these skills occurs through the activity of the child within society. A further aspect of internalization is appropriation, in which the child takes a tool and makes it his own, perhaps using it in a way unique to himself. Internalizing the use of a pencil allows the child to use it very much for his own ends rather than draw exactly what others in society have drawn previously.

Guided participation, which takes place when creative thinkers interact with a knowledgeable person, is practiced around the world. Cultures may differ, though, in the goals of development. For example, Mayan mothers in Guatemala help their daughters learn to weave through guided participation.

Psychology of play
Less known is Vygotsky’s research on play, or children’s games, as a psychological phenomenon and its role in the child’s development. Through play the child develops abstract meaning separate from the objects in the world, which is a critical feature in the development of higher mental functions.

The famous example Vygotsky gives is of a child who wants to ride a horse but cannot. If the child were under three, he would perhaps cry and be angry, but around the age of three the child’s relationship with the world changes: “Henceforth play is such that the explanation for it must always be that it is the imaginary, illusory realization of unrealizable desires. Imagination is a new formation that is not present in the consciousness of the very raw young child, is totally absent in animals, and represents a specifically human form of conscious activity. Like all functions of consciousness, it originally arises from action.” (Vygotsky, 1978)

The child wishes to ride a horse but cannot, so he picks up a stick and stands astride of it, thus pretending he is riding a horse. The stick is a pivot. “Action according to rules begins to be determined by ideas, not by objects…. It is terribly difficult for a child to sever thought (the meaning of a word) from object. Play is a transitional stage in this direction. At that critical moment when a stick – i.e., an object – becomes a pivot for severing the meaning of horse from a real horse, one of the basic psychological structures determining the child’s relationship to reality is radically altered”.

As children get older, their reliance on pivots such as sticks, dolls and other toys diminishes. They have internalized these pivots as imagination and abstract concepts through which they can understand the world. “The old adage that ‘children’s play is imagination in action’ can be reversed: we can say that imagination in adolescents and schoolchildren is play without action” (Vygotsky, 1978).

Another aspect of play that Vygotsky referred to was the development of social rules that develop, for example, when children play house and adopt the roles of different family members. Vygotsky cites an example of two sisters playing at being sisters. The rules of behavior between them that go unnoticed in daily life are consciously acquired through play. As well as social rules, the child acquires what we now refer to as self-regulation. For example, when a child stands at the starting line of a running race, she may well desire to run immediately so as to reach the finish line first, but her knowledge of the social rules surrounding the game and her desire to enjoy the game enable her to regulate her initial impulse and wait for the start signal.

**Thought and Language**

Perhaps Vygotsky’s most important contribution concerns the inter-relationship of language development and thought. This concept, explored in Vygotsky’s book Thought and Language, (alternative translation: Thinking and Speaking) establishes the explicit and profound connection between speech (both silent inner speech and oral language), and the development of mental concepts and cognitive awareness. It should be noted that Vygotsky described inner speech as being qualitatively different from normal (external) speech.
Although Vygotsky believed inner speech developed from external speech via a gradual process of internalization, with younger children only really able to "think out loud," he claimed that in its mature form inner speech would be unintelligible to anyone except the thinker, and would not resemble spoken language as we know it (in particular, being greatly compressed). Hence, thought itself develops socially.

An infant learns the meaning of signs through interaction with its main care-givers, e.g., pointing, cries, and gurgles can express what is wanted. How verbal sounds can be used to conduct social interaction is learned through this activity, and the child begins to utilize, build, and develop this faculty, e.g., using names for objects, etc.

Language starts as a tool external to the child used for social interaction. The child guides personal behavior by using this tool in a kind of self-talk or "thinking out loud." Initially, self-talk is very much a tool of social interaction and it tapers to negligible levels when the child is alone or with deaf children. Gradually self-talk is used more as a tool for self-directed and self-regulating behavior. Then, because speaking has been appropriated and internalized, self-talk is no longer present around the time the child starts school. Self-talk "develops along a rising not a declining, curve; it goes through an evolution, not an involution. In the end, it becomes inner speech" (Vygotsky, 1987, pg 57). Inner speech develops through its differentiation from social speech.

Speaking has thus developed along two lines, the line of social communication and the line of inner speech, by which the child mediates and regulates their activity through their thoughts which in turn are mediated by the semiotics (the meaningful signs) of inner speech. This is not to say that thinking cannot take place without language, but rather that it is mediated by it and thus develops to a much higher level of sophistication. Just as the birthday cake as a sign provides much deeper meaning than its physical properties allow, inner speech as signs provides much deeper meaning than the lower psychological functions would otherwise allow.

Inner speech is not comparable in form to external speech. External speech is the process of turning thought into words. Inner speech is the opposite; it is the conversion of speech into inward thought. Inner speech for example contains predicates only. Subjects are superfluous. Words too are used much more economically. One word in inner speech may be so replete with sense to the individual that it would take many words to express it in external speech.

**Zone of proximal development**

"Zone of proximal development" (ZPD) is Vygotsky’s term for the range of tasks that a child can complete independently and those completed with the guidance and assistance of adults or more-skilled children. The lower limit of ZPD is the level of skill reached by the child working independently. The upper limit is the level of additional responsibility the child can accept with the assistance of an able instructor. The ZPD captures the child’s cognitive skills that are in the process of maturing and can be accomplished only with the assistance of a more-skilled person. Scaffolding is a concept closely related to the idea of
ZPD. Scaffolding is changing the level of support. Over the course of a teaching session, a more-skilled person adjusts the amount of guidance to fit the child’s current performance. Dialogue is an important tool of this process in the zone of proximal development. In a dialog; a child’s unsystematic, disorganized, and spontaneous concepts are met with the more systematic, logical and rational concepts of the skilled helper.

**Influence in Eastern Europe**

In the Soviet Union, the work of the group of Vygotsky’s students known as the Kharkov School of Psychology was vital for preserving the scientific legacy of Lev Vygotsky and identifying new avenues of its subsequent development. The members of the group laid a foundation for Vygotskian psychology’s systematic development in such diverse fields as the psychology of memory (P. Zinchenko), perception, sensation and movement (Zaporozhets, Asnin, A. N. Leont’ev), personality (L. Bozhovich, Asnin, A. N. Leont’ev), will and volition (Zaporozhets, A. N. Leont’ev, P. Zinchenko, L. Bozhovich, Asnin), psychology of play (G. D. Lukov, D. El’konin) and psychology of learning (P. Zinchenko, L. Bozhovich, D. El’konin), as well as the theory of step-by-step formation of mental actions (Gal’perin), general psychological activity theory (A. N. Leont’ev) and psychology of action (Zaporozhets). A. Puzyrey elaborated the ideas of Vygotsky in respect of psychotherapy and even in the broader context of deliberate psychological intervention (psychotechnique), in general.

**Critics**

In the Soviet Union, the school of Vygotsky and, specifically, his cultural-historical psychology was much criticized during his lifetime as well as after his death. By the beginning of the 1930s, the school was defeated in Soviet academic and political circles by Vygotsky’s "scientific" opponents who criticized him for "idealist aberrations", which at that time equaled with the charge in disloyalty to the Communist Party (and, particularly during the Stalin era, frequently entailed serious consequences not only for academic work but also in terms of potential prosecution, detention, and/or execution). As a result of this criticism of their work, a major group of Vygotsky’s students including Luria and Leontiev had to flee from Moscow to Ukraine where they established the Kharkov school of psychology. Later, the representatives of the school would, in turn, in the second half of the 1930s criticize Vygotsky himself for his interest in the cross-disciplinary study of the child that was developed under the umbrella term of paedology (also spelled as pedology) as well as for his ignoring the role of practice and practical, object-bound activity and arguably his emphasis on the research on the role of language and, on the other hand, emotional factors in human development. Much of this early criticism of the 1930s was later discarded by these Vygotskian scholars themselves. Another line of the critique of Vygotsky’s psychological theory comes from such major figures of the Soviet psychology as Sergei Rubinstein and his followers who criticized Vygotsky’s notion of mediation and its development in the works of students.

Some critics say Vygotsky overemphasized the role of language in thinking. Also, his emphasis on collaboration and guidance has potential pitfalls if facilitators are too helpful.
in some cases. An example of that would be an overbearing and controlling parent. Other critics argue that some children may become lazy and expect help when they can do something on their own.

**Cultural-historical psychology**

Cultural-historical psychology (also called the school of Vygotsky, sociocultural psychology, socio-historical psychology, activity theory, cultural psychology, cultural historical activity theory, and social development theory) is a theory of psychology founded by Lev Vygotsky at the end of the 1920s and developed by his students and followers in Eastern Europe and worldwide.

Cultural-historical psychology emerged as a response to Cartesian dualism between mind and body in psychology of that time as a deliberate attempt to establish a new paradigm in psychological research that would overcome the narrow objectivism of behaviourism (Watson) and subjectivism of introspective psychology of Wundt, James, and others. It focuses on human development to make genetic claims about the function of mind in activity. These claims could be part of, or a basis for, a return to the unity of human sciences.

Vygotsky and his associates postulate in principle non-adaptive character and the mechanisms of higher psychical (mental) functions development. Defining the main goal of psychological inquiry as an objective study of human consciousness, the members of Vygotsky's school investigate the role of cultural mediation and such cultural mediators as word, sign (Vygotsky), symbol, myth (Losev, V. Zinchenko) in the development of human higher psychical functions, development of personality and its "top-most' phenomenology.

A basic distinguishing feature of cultural-historical psychology is that "the species-specific characteristic of human beings is their need and ability to inhabit an environment transformed by the activity of prior members of their species. Such transformations and the mechanism of the transfer of these transformations from one generation to the next are the result of the ability/proclivity of human beings to create and use artifacts - aspects of the material world that are taken up into human action as modes of coordinating with the physical and social environment." (Cole 1995, p. 190) In this way, research has been done into the effects of literacy (Cole & Scribner) and mathematics (Saxe) outside of traditional schooling to understand how cognition develops embedded in a given place and time.

**Cultural mediation**

Cultural mediation is one of the fundamental mechanisms of distinctly human development according to cultural-historical psychological theory introduced by Lev Vygotsky and developed in the work of his numerous followers worldwide.

**Introduction**
Vygotsky investigated child development and how this was guided by the role of culture and interpersonal communication. Vygotsky observed how higher mental functions developed through social interactions with significant people in a child's life, particularly parents, but also other adults. Through these interactions, a child came to learn the habits of mind of her/his culture, including speech patterns, written language, and other symbolic knowledge through which the child derives meaning and affects a child's construction of his or her knowledge. This key premise of Vygotskian psychology is often referred to as "cultural mediation". The specific knowledge gained by a child through these interactions also represented the shared knowledge of a culture. This process is known as internalization.

**Example**

The easiest way to understand mediation is to start with an example and follow with the Vygotskian principles behind it.

At a North American girl's fourth birthday, she sits at the table with friends and family. As the candles on her birthday cake are lit and it is placed on the table, the child gains a feeling of deeply felt joy. This is not only because she knows the cake is sweet and she likes sweet food, nor that the candles' sparkling is pleasing to her eyes. While these would be sufficient reason to arouse an emotional response in an ape, there are mental processes in a four-year-old that extend well beyond this. She patiently waits as her family and friends sing "Happy Birthday to You". The joy is not in the cake itself but in the cake's specific meaning to her. It is a sign that today is a special day for her in which she is the center of attention and that her friends and family are praising her. It's also a sign that she is bigger and as such has higher status among her peers. It's not just a cake, it is a birthday cake and, more specifically, it is her own. The true significance of the birthday cake then, is not in its physical properties at all, but rather in the significance bestowed upon it by the culture the daughter is growing into. This is not restricted to such artifacts as a birthday cake. A classroom, a game of soccer, a fire engine are all first and foremost cultural artifacts from which children derive meaning.

This example can help us understand Vygotsky's approach to human development. Like animals, we have lower mental functions tied closely to biological processes. In our birthday cake example, a toddler may well have reached out to take a handful of cream from the cake as soon as she saw it and the four-year-old may have been tempted to do the same. In humans, however, lower mental functions facilitate a new line of development qualitatively unique to humans. Vygotsky referred to this as the higher mental functions. The lower mental functions cannot be equated to those of an ape as they are interwoven with the line of higher mental functions and are essential to them.

"The history of child behavior is born from the interweaving of these two lines. The history of the development of the higher mental functions is impossible without a study of their prehistory, their biological roots, and their organic disposition." (Vygotsky, 1978, p. 46)
However, it is this higher line of development that explains the birthday cake example with profound insight.

From the perspective of an individual child's development, the higher psychological line of development is one guided by the development of tools and signs within the culture. In our example above, the birthday cake is much more than a source of nourishment, it is a sign with much deeper and broader meaning. The sign mediates between the immediate sensory input and the child’s response, and in so doing allows for a moment of reflection and self-regulation that would not otherwise be possible. To the extent that these signs can be used to influence or change our physical or social environment they are tools. Even the birthday cake can be considered as a tool in that the parents use it to establish that their daughter is now older and has a new status in society.

The cake is a sophisticated example. Tools and signs can be much simpler, such as an infant pointing to an object she desires. At first she may simply be trying to reach the object, but the mother’s response of passing the object helps the infant realize that the action of pointing is a tool to change the environment according to her needs. It is from these simple inter-subjective beginnings that the world of meaning in the child mediated by tools and signs, including language, develops.

A fundamental premise of Vygotsky’s therefore, is that tools and signs are first and foremost shared between individuals in society and only then can they be internalized by individuals developing in the society as is reflected in this famous quote:

"Every function in the child’s cultural development appears twice: first, on the social level, and later on the individual level; first, between people (interpsychological), and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relations between human individuals." (Vygotsky, 1978, p. 57)

**Zone of proximal development**

The zone of proximal development ( zona ближайшего развития), often abbreviated ZPD, is the difference between what a learner can do without help and what he or she can do with help. It is a concept developed by Soviet psychologist and social constructivist Lev Vygotsky (1896 - 1934).

Vygotsky stated that a child follows an adult’s example and gradually develops the ability to do certain tasks without help. Vygotsky’s often-quoted definition of zone of proximal development presents it as

the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers
Vygotsky and other educational professionals believed education’s role was to give children experience that were within their zones of proximal development, thereby encouraging and advancing their individual learning.

**Origins**

The concept of the zone of proximal development was originally developed by Vygotsky to argue against the use of academic, knowledge-based tests as a means to gauge students' intelligence. Vygotsky argued that, rather than examining what a student knows to determine intelligence, it is better to examine his or her ability to solve problems independently and his or her ability to solve problems with an adult’s help.

**Development**

The concept of ZPD has been expanded, modified, and changed into new concepts since Vygotsky’s original conception.

The concept of scaffolding is closely related to the ZPD, although Vygotsky himself never mentioned the term; instead, scaffolding was developed by other sociocultural theorists applying Vygotsky’s ZPD to educational contexts. Scaffolding is a process through which a teacher or more competent peer helps the student in his or her ZPD as necessary, and tapers off this aid as it becomes unnecessary, much as a scaffold is removed from a building during construction. "Scaffolding [is] the way the adult guides the child’s learning via focused questions and positive interactions." This concept has been further developed by Ann Brown, among others. Several instructional programs were developed on this interpretation of the ZPD, including reciprocal teaching and dynamic assessment.

While the ideas of Vygotsky’s ZPD originally were used strictly for one’s ability to solve problems, Tharp and Gallimore point out that it can be expanded to examining other domains of competence and skills. These specialized zones of development include cultural zones, individual zones, and skill-oriented zones. Early-childhood-development researchers commonly believe that young children learn their native language and motor skills generally by being placed in the zone of proximal development.

Through their work with collaborative groups of adults, Tinsley and Lebak (2009) identified the "Zone of Reflective Capacity". This zone shares the theoretical attributes of the ZPD, but is a more specifically defined construct helpful in describing and understanding the way in which an adult's capacity for reflection can expand when he or she collaborates over an extended period with other adults who have similar goals. Tinsley and Lebak found that, as adults shared their feedback, analysis, and evaluation of one another's work during collaboration, their potential for critical reflection expanded. The zone of reflective capacity expanded as trust and mutual understanding among the peers grew.
The zone of reflective capacity is constructed through the interaction between participants engaged in a common activity and expands when it is mediated by positive interactions with other participants, exactly along the same lines as the ZPD, as Wells (1999) described.

Social constructivism

Social constructivism is a sociological theory of knowledge that applies the general philosophical constructivism into social settings, wherein groups construct knowledge for one another, collaboratively creating a small culture of shared artifacts with shared meanings. When one is immersed within a culture of this sort, one is learning all the time about how to be a part of that culture on many levels. Its origins are largely attributed to Lev Vygotsky.

Social constructivism and social constructionism

Social constructivism is closely related to social constructionism in the sense that people are working together to construct artifacts. However, there is an important difference: social constructionism focuses on the artefacts that are created through the social interactions of a group, while social constructivism focuses on an individual's learning that takes place because of their interactions in a group [reference needed].

A very simple example is an object like a cup. The object can be used for many things, but its shape does suggest some 'knowledge' about carrying liquids (see also Affordance). A more complex example is an online course, not only do the 'shapes' of the software tools indicate certain things about the way online courses should work, but the activities and texts produced within the group as a whole will help shape how each person behaves within that group.

For a philosophical account of one possible social constructionist ontology, see the 'Criticism' section of Representative realism.

Social constructivism and education

Social constructivism has been studied by many educational psychologists, who are concerned with its implications for teaching and learning. Constructivism forms one of the major theories (behaviourism, social learning, constructivism and social constructivism) of child development, arising from the work of Jean Piaget's theory of cognitive development. Piaget's stage theory (describing four successive stages of development) also became known as constructivism, because he believed children needed to construct an understanding of the world for themselves. Social constructivism extends constructivism by incorporating the role of other actors and culture in development. In this sense it can also be contrasted with social learning theory by stressing interaction over observation.
Vygotsky’s contributions reside in Mind in Society (1930, 1978) and Thought and Language (1934, 1986). Vygotsky independently came to the same conclusions as Piaget regarding the constructive nature of development.

For more on the psychological dimensions of social constructivism, see the work of A. Sullivan Palincsar.

An instructional strategy grounded in social constructivism that is an area of active research is computer-supported collaborative learning (CSCL). This strategy gives students opportunities to practice 21st-century skills in communication, knowledge sharing, critical thinking and use of relevant technologies found in the workplace.

Additionally, studies on increasing the use of student discussion in the classroom both support and are grounded in theories of social constructivism. There are a full range of advantages that result from the implementation of discussion in the classroom. Participation in group discussion allows students to generalize and transfer their knowledge of classroom learning and builds a strong foundation for communicating ideas orally (Reznitskaya, Anderson & Kuo, 2007). Many studies argue that discussion plays a vital role in increasing student ability to test their ideas, synthesize the ideas of others, and build deeper understanding of what they are learning (Corden, 2001; Nystrand, 1996; Reznitskaya, Anderson & Kuo, 2007; Weber, Maher, Powell & Lee, 2008). Large and small group discussion also affords students opportunities to exercise self-regulation, self-determination, and a desire to persevere with tasks (Corden, 2001; Matsumara, Slater & Crosson, 2008). Additionally, discussion increases student motivation, collaborative skills, and the ability to problem solve (Dyson, 2004; Matsumara, Slater & Crosson, 2008; Nystrand, 1996). Increasing students’ opportunity to talk with one another and discuss their ideas increases their ability to support their thinking, develop reasoning skills, and to argue their opinions persuasively and respectfully (Reznitskaya, Anderson & Kuo, 2007). Furthermore, the feeling of community and collaboration in classrooms increases through offering more chances for students to talk together (Barab, Dodge, Thomas, Jackson, & Tuzun, 2007; Hale & City, 2002; Weber, Maher, Powell & Lee, 2008).

Given the advantages that result from discussion, it is surprising that it is not used more often. Studies have found that students are not regularly accustomed to participating in academic discourse (Corden, 2001; Nystrand, 1996). Nystrand (1996) argues that teachers rarely choose classroom discussion as an instructional format. The results of Nystrand’s (1996) three year study focusing on 2400 students in 60 different classrooms indicate that the typical classroom teacher spends under three minutes an hour allowing students to talk about ideas with one another and the teacher (Nystrand, 1996). Even within those three minutes of discussion, most talk is not true discussion because it depends upon teacher directed questions with predetermined answers (Corden, 2001; Nystrand, 1996). Multiple observations indicate that students in low socioeconomic schools and lower track classrooms are allowed even fewer opportunities for discussion (Corden, 2001; Nystrand, 1996; Weber, Maher, Powell & Lee, 2008). Teachers who teach as if they value what their students think create learners. Discussion and interactive discourse promote learning because they afford students the opportunity to use language as a demonstration of their
independent thoughts. Discussion elicits sustained responses from students that encourage meaning making through negotiating with the ideas of others. This type of learning “promotes retention and in-depth processing associated with the cognitive manipulation of information” (Nystrand, pg. 28).

Developmental Approach to Personality

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ERIK ERIKSON

1902 - 1994

Dr. C. George Boeree

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Among the Oglala Lakota, it was the tradition for an adolescent boy to go off on his own, weaponless and wearing nothing but a loincloth and mocassins, on a dream quest. Hungry, thirsty, and bone-tired, the boy would expect to have a dream on the fourth day which would reveal to him his life’s path. Returning home, he would relate his dream to the tribal elders, who would interpret it according to ancient practice. And his dream would tell him whether he was destined to be a good hunter, or a great warrior, or expert at the art of horse-stealing, or perhaps to become specialized in the making of weapons, or a spiritual leader, priest, or medicine man.

In some cases, the dream would lead him into the realm of controlled deviations among the Oglala. A dream involving the thunderbird might lead a boy to go through a period of time as a heyoka, which involved acting like a clown or a crazy man. Or a vision of the moon or a white buffalo could lead one to a life as a berdache, a man who dresses and behaves as if he were a woman.

In any case, the number of roles one could play in life was extremely limited for men, and even more so for women. Most people were generalists; very few could afford to be specialists. And you learned these roles by simply being around the other people in your family and community. You learned them by living.

By the time the Oglala Lakota were visited by Erik Erikson, things had changed quite a bit. They had been herded onto a large but barren reservation through a series of wars and unhappy treaties. The main source of food, clothing, shelter, and just about everything else -- the buffalo -- had long since been hunted into near-extinction. Worst of all, the patterns of their lives had been taken from them, not by white soldiers, but by the quiet efforts of government bureaucrats to turn the Lakota into Americans!

Children were made to stay at boarding schools much of the year, in the sincere belief that civilization and prosperity comes with education. At boarding schools they learned many
things that contradicted what they learned at home: They were taught white standards of cleanliness and beauty, some of which contradicted Lakota standards of modesty. They were taught to compete, which contradicted Lakota traditions of egalitarianism. They were told to speak up, when their upbringing told them to be still. In other words, their white teachers found them quite impossible to work with, and their parents found them quite corrupted by an alien culture.

As time went by, their original culture disappeared, but the new culture didn’t provide the necessary substitutions. There were no more dream quests, but then what roles were there left for adolescents to dream themselves into?

Erikson was moved by the difficulties faced by the Lakota children and adolescents he talked to and observed. But growing up and finding one’s place in the world isn’t easy for many other Americans, either. African-Americans struggle to piece together an identity out of forgotten African roots, the culture of powerlessness and poverty, and the culture of the surrounding white majority. Asian-Americans are similarly stretched between Asian and American traditions. Rural Americans find that the cultures of childhood won’t cut it in the larger society. And the great majority of European-Americans have, in fact, little left of their own cultural identities other than wearing green on St. Patrick’s Day or a recipe for marinara sauce from grandma! American culture, because it is everybody’s, is in some senses nobody’s.

Like native Americans, other Americans have also lost many of the rituals that once guided us through life. At what point are you an adult? When you go through puberty? Have your confirmation or bar mitzvah? Your first sexual experience? Sweet sixteen party? Your learner’s permit? Your driver’s license? High school graduation? Voting in your first election? First job? Legal drinking age? College graduation? When exactly is it that everyone treats you like an adult?

Consider some of the contradictions: You may be old enough to be entrusted with a two-ton hunk of speeding metal, yet not be allowed to vote; You may be old enough to die for your country in war, yet not be permitted to order a beer; As a college student, you may be trusted with thousands of dollars of student loans, yet not be permitted to choose your own classes.

In traditional societies (even our own only 50 or 100 years ago), a young man or woman looked up to his or her parents, relations, neighbors, and teachers. They were decent, hard-working people (most of them) and we wanted to be just like them.

Unfortunately, most children today look to the mass media, especially T.V., for role models. It is easy to understand why. The people on T.V. are prettier, richer, smarter, wittier, healthier, and happier than anybody in our own neighborhoods! Unfortunately, they aren’t real. I’m always astounded at how many new college students are quickly disappointed to discover that their chosen field actually requires a lot of work and study. It doesn’t on T.V. Later, many people are equally surprised that the jobs they worked so hard to get aren’t as creative and glorious and fulfilling as they expected. Again, that isn’t how it is on T.V. It
shouldn’t surprise us that so many young people look to the short-cuts that crime seems to offer, or the fantasy life that drugs promise.

Some of you may see this as an exaggeration or a stereotype of modern adolescence. I certainly hope that your passage from childhood to adulthood was a smooth one. But a lot of people -- myself and Erikson included -- could have used a dream quest.

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**Biography**

Erik Erikson was born in Frankfurt, Germany, on June 15, 1902. There is a little mystery about his heritage: His biological father was an unnamed Danish man who abandoned Erik's mother before he was born. His mother, Karla Abrahamsen, was a young Jewish woman who raised him alone for the first three years of his life. She then married Dr. Theodor Homberger, who was Erik's pediatrician, and moved to Karlsruhe in southern Germany.

We cannot pass over this little piece of biography without some comment: The development of identity seems to have been one of his greatest concerns in Erikson’s own life as well as in his theory. During his childhood, and his early adulthood, he was Erik Homberger, and his parents kept the details of his birth a secret. So here he was, a tall, blond, blue-eyed boy who was also Jewish. At temple school, the kids teased him for being Nordic; at grammar school, they teased him for being Jewish.

After graduating high school, Erik focussed on becoming an artist. When not taking art classes, he wandered around Europe, visiting museums and sleeping under bridges. He was living the life of the carefree rebel, long before it became "the thing to do."

When he was 25, his friend Peter Blos -- a fellow artist and, later, psychoanalyst -- suggested he apply for a teaching position at an experimental school for American students run by Dorothy Burlingham, a friend of Anna Freud. Besides teaching art, he gathered a certificate in Montessori education and one from the Vienna Psychoanalytic Society. He was psychoanalyzed by Anna Freud herself.

While there, he also met Joan Serson, a Canadian dance teacher at the school. They went on the have three children, one of whom became a sociologist himself.

With the Nazis coming into power, they left Vienna, first for Copenhagen, then to Boston. Erikson was offered a position at the Harvard Medical School and practiced child psychoanalysis privately. During this time, he met psychologists like Henry Murray and Kurt Lewin, and anthropologists like Ruth Benedict, Margaret Mead, and Gregory Bateson. I think it can be safely said that these anthropologists had nearly as great an effect on Erikson as Sigmund and Anna Freud!

He later taught at Yale, and later still at the University of California at
Berkeley. It was during this period of time that he did his famous studies of modern life among the Lakota and the Yurok.

When he became an American citizen, he officially changed his name to Erik Erikson. Erikson’s son, Kai Erikson, believes it was just a decision to define himself as a self-made man: Erik, son of Erik.

In 1950, he wrote Childhood and Society, which contained summaries of his studies among the native Americans, analyses of Maxim Gorky and Adolph Hitler, a discussion of the "American personality," and the basic outline of his version of Freudian theory. These themes -- the influence of culture on personality and the analysis of historical figures -- were repeated in other works, one of which, Gandhi’s Truth, won him the Pulitzer Prize and the national Book Award.

In 1950, during Senator Joseph McCarthy’s reign of terror, Erikson left Berkeley when professors there were asked to sign "loyalty oaths." He spent ten years working and teaching at a clinic in Massachusetts, and ten years more back at Harvard. Since retiring in 1970, he wrote and did research with his wife. He died in 1994.

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**Theory**

Erikson is a Freudian **ego-psychologist**. This means that he accepts Freud’s ideas as basically correct, including the more debatable ideas such as the Oedipal complex, and accepts as well the ideas about the ego that were added by other Freudian loyalists such as Heinz Hartmann and, of course, Anna Freud. However, Erikson is much more society and culture-oriented than most Freudsians, as you might expect from someone with his anthropological interests, and he often pushes the instincts and the unconscious practically out of the picture. Perhaps because of this, Erikson is popular among Freudsians and non-Freudsians alike!

**The epigenetic principle**

He is most famous for his work in refining and expanding Freud’s theory of stages. Development, he says, functions by the **epigenetic principle**. This principle says that we develop through a predetermined unfolding of our personalities in eight stages. Our progress through each stage is in part determined by our success, or lack of success, in all the previous stages. A little like the unfolding of a rose bud, each petal opens up at a certain time, in a certain order, which nature, through its genetics, has determined. If we interfere in the natural order of development by pulling a petal forward prematurely or out of order, we ruin the development of the entire flower.

Each stage involves certain developmental **tasks** that are psychosocial in nature. Although he follows Freudian tradition by calling them **crises**, they are more drawn out and less specific than that term implies. The child in grammar school, for example, has to learn to be
industrious during that period of his or her life, and that industriousness is learned through the complex social interactions of school and family.

The various tasks are referred to by two terms. The infant's task, for example, is called "trust-mistrust." At first, it might seem obvious that the infant must learn trust and not mistrust. But Erikson made it clear that there it is a balance we must learn: Certainly, we need to learn mostly trust; but we also need to learn a little mistrust, so as not to grow up to become gullible fools!

Each stage has a certain **optimal time** as well. It is no use trying to rush children into adulthood, as is so common among people who are obsessed with success. Neither is it possible to slow the pace or to try to protect our children from the demands of life. There is a time for each task.

If a stage is managed well, we carry away a certain **virtue** or psychosocial strength which will help us through the rest of the stages of our lives. On the other hand, if we don't do so well, we may develop maladaptations and malignancies, as well as endanger all our future development. A malignancy is the worse of the two, and involves too little of the positive and too much of the negative aspect of the task, such as a person who can't trust others. A maladaptation is not quite as bad and involves too much of the positive and too little of the negative, such as a person who trusts too much.

**Children and adults**

Perhaps Erikson's greatest innovation was to postulate not five stages, as Freud had done, but eight. Erikson elaborated Freud's genital stage into adolescence plus three stages of adulthood. We certainly don't stop developing -- especially psychologically -- after our twelfth or thirteenth birthdays; It seems only right to extend any theory of stages to cover later development!

Erikson also had some things to say about the interaction of generations, which he called **mutuality.** Freud had made it abundantly clear that a child's parents influence his or her development dramatically. Erikson pointed out that children influence their parents' development as well. The arrival of children, for example, into a couple's life, changes that life considerably, and moves the new parents along their developmental paths. It is even appropriate to add a third (and in some cases, a fourth) generation to the picture: Many of us have been influenced by our grandparents, and they by us.

A particularly clear example of mutuality can be seen in the problems of the teenage mother. Although the mother and her child may have a fine life together, often the mother is still involved in the tasks of adolescence, that is, in finding out who she is and how she fits into the larger society. The relationship she has or had with the child's father may have been immature on one or both sides, and if they don't marry, she will have to deal with the problems of finding and developing a relationship as well. The infant, on the other hand, has the simple, straight-forward needs that infants have, and the most important of these is a mother with the mature abilities and social support a mother should have. If the mother's
parents step in to help, as one would expect, then they, too, are thrown off of their developmental tracks, back into a life-style they thought they had passed, and which they might find terribly demanding. And so on....

The ways in which our lives intermesh are terribly complex and very frustrating to the theorist. But ignoring them is to ignore something vitally important about our development and our personalities.

<table>
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<tr>
<th>Stage (age)</th>
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<th>Significant relations</th>
<th>Psychosocial modalities</th>
<th>Psychosocial virtues</th>
<th>Maladaptations &amp; malignancies</th>
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<td>VIII (50's and beyond) -- old adult</td>
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<td>presumption despair</td>
</tr>
</tbody>
</table>

Chart adapted from Erikson's 1959 *Identity and the Life Cycle* (*Psychological Issues* vol 1, #1)
The first stage

The first stage, infancy or the oral-sensory stage, is approximately the first year or year and a half of life. The task is to develop trust without completely eliminating the capacity for mistrust.

If mom and dad can give the newborn a degree of familiarity, consistency, and continuity, then the child will develop the feeling that the world -- especially the social world -- is a safe place to be, that people are reliable and loving. Through the parents' responses, the child also learns to trust his or her own body and the biological urges that go with it.

If the parents are unreliable and inadequate, if they reject the infant or harm it, if other interests cause both parents to turn away from the infants needs to satisfy their own instead, then the infant will develop mistrust. He or she will be apprehensive and suspicious around people.

Please understand that this doesn't mean that the parents have to be perfect. In fact, parents who are overly protective of the child, are there the minute the first cry comes out, will lead that child into the maladaptive tendency Erikson calls sensory maladjustment: Overly trusting, even gullible, this person cannot believe anyone would mean them harm, and will use all the defenses at their command to retain their pollyanna perspective.

Worse, of course, is the child whose balance is tipped way over on the mistrust side: They will develop the malignant tendency of withdrawal, characterized by depression, paranoia, and possibly psychosis.

If the proper balance is achieved, the child will develop the virtue hope, the strong belief that, even when things are not going well, they will work out well in the end. One of the signs that a child is doing well in the first stage is when the child isn't overly upset by the need to wait a moment for the satisfaction of his or her needs: Mom or dad don't have to be perfect; I trust them enough to believe that, if they can't be here immediately, they will be here soon; Things may be tough now, but they will work out. This is the same ability that, in later life, gets us through disappointments in love, our careers, and many other domains of life.

Stage two

The second stage is the anal-muscular stage of early childhood, from about eighteen months to three or four years old. The task is to achieve a degree of autonomy while minimizing shame and doubt.

If mom and dad (and the other care-takers that often come into the picture at this point) permit the child, now a toddler, to explore and manipulate his or her environment, the child will develop a sense of autonomy or independence. The parents
should not discourage the child, but neither should they push. A balance is required. People often advise new parents to be "firm but tolerant" at this stage, and the advice is good. This way, the child will develop both self-control and self-esteem.

On the other hand, it is rather easy for the child to develop instead a sense of shame and doubt. If the parents come down hard on any attempt to explore and be independent, the child will soon give up with the assumption that cannot and should not act on their own. We should keep in mind that even something as innocent as laughing at the toddler’s efforts can lead the child to feel deeply ashamed, and to doubt his or her abilities.

And there are other ways to lead children to shame and doubt: If you give children unrestricted freedom and no sense of limits, or if you try to help children do what they should learn to do for themselves, you will also give them the impression that they are not good for much. If you aren't patient enough to wait for your child to tie his or her shoe-laces, your child will never learn to tie them, and will assume that this is too difficult to learn!

Nevertheless, a little "shame and doubt" is not only inevitable, but beneficial. Without it, you will develop the maladaptive tendency Erikson calls impulsiveness, a sort of shameless willfulness that leads you, in later childhood and even adulthood, to jump into things without proper consideration of your abilities.

Worse, of course, is too much shame and doubt, which leads to the malignancy Erikson calls compulsiveness. The compulsive person feels as if their entire being rides on everything they do, and so everything must be done perfectly. Following all the rules precisely keeps you from mistakes, and mistakes must be avoided at all costs. Many of you know how it feels to always be ashamed and always doubt yourself. A little more patience and tolerance with your own children may help them avoid your path. And give yourself a little slack, too!

If you get the proper, positive balance of autonomy and shame and doubt, you will develop the virtue of willpower or determination. One of the most admirable -- and frustrating -- thing about two- and three-year-olds is their determination. "Can do" is their motto. If we can preserve that "can do" attitude (with appropriate modesty to balance it) we are much better off as adults.

**Stage three**

Stage three is the genital-locomotor stage or play age. From three or four to five or six, the task confronting every child is to learn initiative without too much guilt.

Initiative means a positive response to the world's challenges, taking on responsibilities, learning new skills, feeling purposeful. Parents can encourage initiative by encouraging children to try out their ideas. We should accept and encourage fantasy and curiosity and imagination. This is a time for play, not for formal education. The child is now capable, as never before, of imagining a future situation, one that isn't a reality right now. Initiative is the attempt to make that non-reality a reality.
But if children can imagine the future, if they can plan, then they can be responsible as well, and guilty. If my two-year-old flushes my watch down the toilet, I can safely assume that there were no "evil intentions." It was just a matter of a shiny object going round and round and down. What fun! But if my five year old does the same thing... well, she should know what's going to happen to the watch, what's going to happen to daddy's temper, and what's going to happen to her! She can be guilty of the act, and she can begin to feel guilty as well. The capacity for moral judgement has arrived.

Erikson is, of course, a Freudian, and as such, he includes the Oedipal experience in this stage. From his perspective, the Oedipal crisis involves the reluctance a child feels in relinquishing his or her closeness to the opposite sex parent. A parent has the responsibility, socially, to encourage the child to "grow up -- you're not a baby anymore!" But if this process is done too harshly and too abruptly, the child learns to feel guilty about his or her feelings.

Too much initiative and too little guilt means a maladaptive tendency Erikson calls ruthlesslessness. The ruthless person takes the initiative alright; They have their plans, whether it's a matter of school or romance or politics or career. It's just that they don't care who they step on to achieve their goals. The goals are everything, and guilty feelings are for the weak. The extreme form of ruthlesslessness is sociopathy.

Ruthlessness is bad for others, but actually relatively easy on the ruthless person. Harder on the person is the malignancy of too much guilt, which Erikson calls inhibition. The inhibited person will not try things because "nothing ventured, nothing lost" and, particularly, nothing to feel guilty about. On the sexual, Oedipal side, the inhibited person may be impotent or frigid.

A good balance leads to the psychosocial strength of purpose. A sense of purpose is something many people crave in their lives, yet many do not realize that they themselves make their purposes, through imagination and initiative. I think an even better word for this virtue would have been courage, the capacity for action despite a clear understanding of your limitations and past failings.

**Stage four**

Stage four is the latency stage, or the school-age child from about six to twelve. The task is to develop a capacity for industry while avoiding an excessive sense of inferiority. Children must "tame the imagination" and dedicate themselves to education and to learning the social skills their society requires of them.

There is a much broader social sphere at work now. The parents and other family members are joined by teachers and peers and other members of the community at large. They all contribute: Parents must encourage, teachers must care, peers must accept. Children must learn that there is pleasure not only in conceiving a plan, but in carrying it out. They must learn the feeling of success, whether it is in school or on the playground, academic or social.
A good way to tell the difference between a child in the third stage and one in the fourth stage is to look at the way they play games. Four-year-olds may love games, but they will have only a vague understanding of the rules, may change them several times during the course of the game, and be very unlikely to actually finish the game, unless it is by throwing the pieces at their opponents. A seven-year-old, on the other hand, is dedicated to the rules, considers them pretty much sacred, and is more likely to get upset if the game is not allowed to come to its required conclusion.

If the child is allowed too little success, because of harsh teachers or rejecting peers, for example, then he or she will develop instead a sense of inferiority or incompetence. An additional source of inferiority Erikson mentions is racism, sexism, and other forms of discrimination: If a child believes that success is related to who you are rather than to how hard you try, then why try?

Too much industry leads to the maladaptive tendency called narrow virtuosity. We see this in children who aren't allowed to "be children," the ones that parents or teachers push into one area of competence, without allowing the development of broader interests. These are the kids without a life: child actors, child athletes, child musicians, child prodigies of all sorts. We all admire their industry, but if we look a little closer, it's all that stands in the way of an empty life.

Much more common is the malignancy called inertia. This includes all of us who suffer from the "inferiority complexes" Alfred Adler talked about. If at first you don't succeed, don't ever try again! Many of us didn't do well in mathematics, for example, so we'd die before we took another math class. Others were humiliated instead in the gym class, so we never try out for a sport or play a game of raquetball. Others never developed social skills -- the most important skills of all -- and so we never go out in public. We become inert.

A happier thing is to develop the right balance of industry and inferiority -- that is, mostly industry with just a touch of inferiority to keep us sensibly humble. Then we have the virtue called competency.

**Stage five**

Stage five is adolescence, beginning with puberty and ending around 18 or 20 years old. The task during adolescence is to achieve ego identity and avoid role confusion. It was adolescence that interested Erikson first and most, and the patterns he saw here were the bases for his thinking about all the other stages.

Ego identity means knowing who you are and how you fit in to the rest of society. It requires that you take all you've learned about life and yourself and mold it into a unified self-image, one that your community finds meaningful.
There are a number of things that make things easier: First, we should have a mainstream adult culture that is worthy of the adolescent's respect, one with good adult role models and open lines of communication.

Further, society should provide clear rites of passage, certain accomplishments and rituals that help to distinguish the adult from the child. In primitive and traditional societies, an adolescent boy may be asked to leave the village for a period of time to live on his own, hunt some symbolic animal, or seek an inspirational vision. Boys and girls may be required to go through certain tests of endurance, symbolic ceremonies, or educational events. In one way or another, the distinction between the powerless, but irresponsible, time of childhood and the powerful and responsible time of adulthood, is made clear.

Without these things, we are likely to see role confusion, meaning an uncertainty about one's place in society and the world. When an adolescent is confronted by role confusion, Erikson says he or she is suffering from an identity crisis. In fact, a common question adolescents in our society ask is a straightforward question of identity: "Who am I?"

One of Erikson's suggestions for adolescence in our society is the psychosocial moratorium. He suggests you take a little "time out." If you have money, go to Europe. If you don't, bum around the U.S. Quit school and get a job. Quit your job and go to school. Take a break, smell the roses, get to know yourself. We tend to want to get to "success" as fast as possible, and yet few of us have ever taken the time to figure out what success means to us. A little like the young Oglala Lakota, perhaps we need to dream a little.

There is such a thing as too much "ego identity," where a person is so involved in a particular role in a particular society or subculture that there is no room left for tolerance. Erikson calls this maladaptive tendency fanaticism. A fanatic believes that his way is the only way. Adolescents are, of course, known for their idealism, and for their tendency to see things in black-and-white. These people will gather others around them and promote their beliefs and life-styles without regard to others' rights to disagree.

The lack of identity is perhaps more difficult still, and Erikson refers to the malignant tendency here as repudiation. They repudiate their membership in the world of adults and, even more, they repudiate their need for an identity. Some adolescents allow themselves to "fuse" with a group, especially the kind of group that is particularly eager to provide the details of your identity: religious cults, militaristic organizations, groups founded on hatred, groups that have divorced themselves from the painful demands of mainstream society. They may become involved in destructive activities, drugs, or alcohol, or you may withdraw into their own psychotic fantasies. After all, being "bad" or being "nobody" is better than not knowing who you are!

If you successfully negotiate this stage, you will have the virtue Erikson called fidelity. Fidelity means loyalty, the ability to live by societies standards despite their imperfections and incompleteness and inconsistencies. We are not talking about blind loyalty, and we are not talking about accepting the imperfections. After all, if you love your community, you
will want to see it become the best it can be. But fidelity means that you have found a place in that community, a place that will allow you to contribute.

**Stage six**

If you have made it this far, you are in the stage of young adulthood, which lasts from about 18 to about 30. The ages in the adult stages are much fuzzier than in the childhood stages, and people may differ dramatically. The task is to achieve some degree of **intimacy**, as opposed to remaining in **isolation**.

Intimacy is the ability to be close to others, as a lover, a friend, and as a participant in society. Because you have a clear sense of who you are, you no longer need to fear "losing" yourself, as many adolescents do. The "fear of commitment" some people seem to exhibit is an example of immaturity in this stage. This fear isn't always so obvious. Many people today are always putting off the progress of their relationships: I'll get married (or have a family, or get involved in important social issues) as soon as I finish school, as soon as I have a job, as soon as I have a house, as soon as... If you've been engaged for the last ten years, what's holding you back?

Neither should the young adult need to prove him- or herself anymore. A teenage relationship is often a matter of trying to establish identity through "couple-hood." Who am I? I'm her boy-friend. The young adult relationship should be a matter of two independent egos wanting to create something larger than themselves. We intuitively recognize this when we frown on a relationship between a young adult and a teenager: We see the potential for manipulation of the younger member of the party by the older.

Our society hasn't done much for young adults, either. The emphasis on careers, the isolation of urban living, the splitting apart of relationships because of our need for mobility, and the general impersonal nature of modern life prevent people from naturally developing their intimate relationships. I am typical of many people in having moved dozens of times in my life. I haven't the faintest idea what has happened to the kids I grew up with, or even my college buddies. My oldest friend lives a thousand miles away. I live where I do out of career necessity and, until recently, have felt no real sense of community.

Before I get too depressing, let me mention that many of you may not have had these experiences. If you grew up and stayed in your community, and especially if your community is a rural one, you are much more likely to have deep, long-lasting friendships, to have married your high school sweetheart, and to feel a great love for your community. But this style of life is quickly becoming an anachronism.

Erikson calls the maladaptive form **promiscuity**, referring particularly to the tendency to become intimate too freely, too easily, and without any depth to your intimacy. This can be true of your relationships with friends and neighbors and your whole community as well as with lovers.
The malignancy he calls **exclusion**, which refers to the tendency to isolate oneself from love, friendship, and community, and to develop a certain hatefulness in compensation for one's loneliness.

If you successfully negotiate this stage, you will instead carry with you for the rest of your life the virtue or psychosocial strength Erikson calls **love**. Love, in the context of his theory, means being able to put aside differences and antagonisms through "mutuality of devotion." It includes not only the love we find in a good marriage, but the love between friends and the love of one's neighbor, co-worker, and compatriot as well.

**Stage seven**

The seventh stage is that of **middle adulthood**. It is hard to pin a time to it, but it would include the period during which we are actively involved in raising children. For most people in our society, this would put it somewhere between the middle twenties and the late fifties. The task here is to cultivate the proper balance of **generativity** and **stagnation**.

Generativity is an extension of love into the future. It is a concern for the next generation and all future generations. As such, it is considerably less "selfish" than the intimacy of the previous stage: Intimacy, the love between lovers or friends, is a love between equals, and it is necessarily reciprocal. Oh, of course we love each other unselfishly, but the reality is such that, if the love is not returned, we don't consider it a true love. With generativity, that implicit expectation of reciprocity isn't there, at least not as strongly. Few parents expect a "return on their investment" from their children; If they do, we don't think of them as very good parents!

Although the majority of people practice generativity by having and raising children, there are many other ways as well. Erikson considers teaching, writing, invention, the arts and sciences, social activism, and generally contributing to the welfare of future generations to be generativity as well -- anything, in fact, that satisfies that old "need to be needed."

Stagnation, on the other hand, is self-absorption, caring for no-one. The stagnant person ceases to be a productive member of society. It is perhaps hard to imagine that we should have any "stagnation" in our lives, but the maladaptive tendency Erikson calls **overextension** illustrates the problem: Some people try to be so generative that they no longer allow time for themselves, for rest and relaxation. The person who is overextended no longer contributes well. I'm sure we all know someone who belongs to so many clubs, or is devoted to so many causes, or tries to take so many classes or hold so many jobs that they no longer have time for any of them!

More obvious, of course, is the malignant tendency of **rejectivity**. Too little generativity and too much stagnation and you are no longer participating in or contributing to society. And much of what we call "the meaning of life" is a matter of how we participate and what we contribute.
This is the stage of the "midlife crisis." Sometimes men and women take a look at their lives and ask that big, bad question "what am I doing all this for?" Notice the question carefully: Because their focus is on themselves, they ask what, rather than whom, they are doing it for. In their panic at getting older and not having experienced or accomplished what they imagined they would when they were younger, they try to recapture their youth. Men are often the most flambouyant examples: They leave their long-suffering wives, quit their humdrum jobs, buy some "hip" new clothes, and start hanging around singles bars. Of course, they seldom find what they are looking for, because they are looking for the wrong thing!

But if you are successful at this stage, you will have a capacity for caring that will serve you through the rest of your life.

**Stage eight**

This last stage, referred to delicately as late adulthood or maturity, or less delicately as old age, begins sometime around retirement, after the kids have gone, say somewhere around 60. Some older folks will protest and say it only starts when you feel old and so on, but that’s an effect of our youth-worshipping culture, which has even old people avoiding any acknowledgement of age. In Erikson’s theory, reaching this stage is a good thing, and not reaching it suggests that earlier problems retarded your development!

The task is to develop ego integrity with a minimal amount of despair. This stage, especially from the perspective of youth, seems like the most difficult of all. First comes a detachment from society, from a sense of usefulness, for most people in our culture. Some retire from jobs they’ve held for years; others find their duties as parents coming to a close; most find that their input is no longer requested or required.

Then there is a sense of biological uselessness, as the body no longer does everything it used to. Women go through a sometimes dramatic menopause; Men often find they can no longer "rise to the occasion." Then there are the illnesses of old age, such as arthritis, diabetes, heart problems, concerns about breast and ovarian and prostrate cancers. There come fears about things that one was never afraid of before -- the flu, for example, or just falling down.

Along with the illnesses come concerns of death. Friends die. Relatives die. One’s spouse dies. It is, of course, certain that you, too, will have your turn. Faced with all this, it might seem like everyone would feel despair.
In response to this despair, some older people become preoccupied with the past. After all, that’s where things were better. Some become preoccupied with their failures, the bad decisions they made, and regret that (unlike some in the previous stage) they really don’t have the time or energy to reverse them. We find some older people become depressed, spiteful, paranoid, hypochondriacal, or developing the patterns of senility with or without physical bases.

Ego integrity means coming to terms with your life, and thereby coming to terms with the end of life. If you are able to look back and accept the course of events, the choices made, your life as you lived it, as being necessary, then you needn’t fear death. Although most of you are not at this point in life, perhaps you can still sympathize by considering your life up to now. We’ve all made mistakes, some of them pretty nasty ones; Yet, if you hadn’t made these mistakes, you wouldn’t be who you are. If you had been very fortunate, or if you had played it safe and made very few mistakes, your life would not have been as rich as is.

The maladaptive tendency in stage eight is called presumption. This is what happens when a person "presumes" ego integrity without actually facing the difficulties of old age. The malignant tendency is called disdain, by which Erikson means a contempt of life, one’s own or anyone’s.

Someone who approaches death without fear has the strength Erikson calls wisdom. He calls it a gift to children, because "healthy children will not fear life if their elders have integrity enough not to fear death." He suggests that a person must be somewhat gifted to be truly wise, but I would like to suggest that you understand "gifted" in as broad a fashion as possible: I have found that there are people of very modest gifts who have taught me a great deal, not by their wise words, but by their simple and gentle approach to life and death, by their "generosity of spirit."

Discussion

I can’t think of anyone, other than Jean Piaget, who has promoted the stage approach to development more than Erik Erikson. And yet stages are not at all a popular concept among personality theorists. Of the people reviewed in this text, only Sigmund and Anna Freud fully share his convictions. Most theorists prefer an incremental or gradual approach to development, and speak of "phases" or "transitions" rather than of clearly marked stages.

But there are certain segments of life that are fairly easy to identify, that do have the necessary quality of biologically determined timing. Adolescence is "preprogrammed" to occur when it occurs, as is birth and, very possibly, natural death. The first year of life has some special, fetus-like qualities, and the last year of life includes certain "catastrophic" qualities.

If we stretch the meaning of stages to include certain logical sequences, i.e. things that happen in a certain order, not because they are biologically so programmed, but because they don’t make sense any other way, we can make an even better case: weaning and potty
training have to precede the independence from mother required by schooling; one is normally sexually mature before finding a lover, normally finds a lover before having children, and necessarily has children before enjoying their leaving!

And if we stretch the meaning of stages even further to include social "programming" as well as biological, we can include periods of dependence and schooling and work and retirement as well. So stretched, it is no longer a difficult matter to come up with seven or eight stages; Only now, of course, you'd be hard pressed to call them stages, rather than "phases" or something equally vague:

It is, in fact, hard to defend Erikson's eight stages if we accept the demands of his understanding of what stages are. In different cultures, even within cultures, the timing can be quite different: In some countries, babies are weaned at six months and potty trained at nine months; in others, they still get the breast at five and potty training involves little more than taking it outside. At one time in our own culture, people were married at thirteen and had their first child by fifteen. Today, we tend to postpone marriage until thirty and rush to have our one and only child before forty. We look forward to many years of retirement; in other times and other places, retirement is unknown.

And yet Erikson's stages do seem to give us a framework. We can talk about our culture as compared with others', or today as compared with a few centuries ago, by looking at the ways in which we differ relative to the "standard" his theory provides. Erikson and other researchers have found that the general pattern does in fact hold across cultures and times, and most of us find it quite familiar. In other words, his theory meets one of the most important standards of personality theory, a standard sometimes more important than "truth:" It is useful.

It also offers us insights we might not have noticed otherwise. For example, you may tend to think of his eight stages as a series of tasks that don't follow any particularly logical course. But if you divide the lifespan into two sequences of four stages, you can see a real pattern, with a child development half and an adult development half.

In stage I, the infant must learn that "it" (meaning the world, especially as represented by mom and dad and itself) is "okay." In stage II, the toddler learns "I can do," in the here-and-now. In stage III, the preschooler learns "I can plan," and project him or herself into the future. In stage IV, the school-age child learns "I can finish" these projections. In going through these four stages, the child develops a competent ego, ready for the larger world.

In the adult half of the scheme, we expand beyond the ego. Stage V, is concerned with establishing something very similar to "it is okay:" The adolescent must learn that "I am okay," a conclusion predicated on successful negotiation of the preceding four stages. In stage VI, the young adult must learn to love, which is a sort of social "I can do," in the here-and-now. In stage VII, the adult must learn to extend that love into the future, as caring. And in stage VIII, the old person must learn to "finish" him- or herself as an ego, and establish a new and broader identity. We could borrow Jung's term, and say that the second half of live is devoted to realizing one's self.
JEAN PIAGET
1896 - 1980
Dr. C. George Boeree

Biography

Jean Piaget was born in Neuchâtel, Switzerland, on August 9, 1896. His father, Arthur Piaget, was a professor of medieval literature with an interest in local history. His mother, Rebecca Jackson, was intelligent and energetic, but Jean found her a bit neurotic -- an impression that he said led to his interest in psychology, but away from pathology! The oldest child, he was quite independent and took an early interest in nature, especially the collecting of shells. He published his first “paper” when he was ten -- a one page account of his sighting of an albino sparrow.

He began publishing in earnest in high school on his favorite subject, mollusks. He was particularly pleased to get a part time job with the director of Nuechâtel’s Museum of Natural History, Mr. Godel. His work became well known among European students of mollusks, who assumed he was an adult! All this early experience with science kept him away, he says, from “the demon of philosophy.”

Later in adolescence, he faced a bit a crisis of faith: Encouraged by his mother to attend religious instruction, he found religious argument childish. Studying various philosophers and the application of logic, he dedicated himself to finding a “biological explanation of knowledge.” Ultimately, philosophy failed to assist him in his search, so he turned to psychology.

After high school, he went on to the University of Neuchâtel. Constantly studying and writing, he became sickly, and had to retire to the mountains for a year to recuperate. When he returned to Neuchâtel, he decided he would write down his philosophy. A fundamental point became a centerpiece for his entire life’s work: “In all fields of life (organic, mental, social) there exist ‘totalities’ qualitatively distinct from their parts and imposing on them an organization.” This principle forms the basis of his structuralist philosophy, as it would for the Gestaltists, Systems Theorists, and many others.

In 1918, Piaget received his Doctorate in Science from the University of Neuchâtel. He worked for a year at psychology labs in Zurich and at Bleuler’s famous psychiatric clinic. During this period, he was introduced to the works of Freud, Jung, and others. In 1919, he taught psychology and philosophy at the Sorbonne in Paris. Here he met Simon (of Simon-Binet fame) and did research on intelligence testing. He didn’t care for the “right-or-
wrong” style of the intelligent tests and started interviewing his subjects at a boys school instead, using the psychiatric interviewing techniques he had learned the year before. In other words, he began asking how children reasoned.

In 1921, his first article on the psychology of intelligence was published in the Journal de Psychologie. In the same year, he accepted a position at the Institut J. J. Rousseau in Geneva. Here he began with his students to research the reasoning of elementary school children. This research became his first five books on child psychology. Although he considered this work highly preliminary, he was surprised by the strong positive public reaction to his work.

In 1923, he married one of his student coworkers, Valentine Châtenay. In 1925, their first daughter was born; in 1927, their second daughter was born; and in 1931, their only son was born. They immediately became the focus of intense observation by Piaget and his wife. This research became three more books!

In 1929, Piaget began work as the director of the International Bureau of Education, a post he would hold until 1967. He also began large scale research with A. Szeminska, E. Meyer, and especially Bärbel Inhelder, who would become his major collaborator. Piaget, it should be noted, was particularly influential in bringing women into experimental psychology. Some of this work, however, wouldn’t reach the world outside of Switzerland until World War II was over.

In 1940, He became chair of Experimental Psychology, the Director of the psychology laboratory, and the president of the Swiss Society of Psychology. In 1942, he gave a series of lectures at the Collège de France, during the Nazi occupation of France. These lectures became The Psychology of Intelligence. At the end of the war, he was named President of the Swiss Commission of UNESCO.

Also during this period, he received a number of honorary degrees. He received one from the Sorbonne in 1946, the University of Brussels and the University of Brazil in 1949, on top of an earlier one from Harvard in 1936. And, in 1949 and 1950, he published his synthesis, Introduction to Genetic Epistemology.

In 1952, he became a professor at the Sorbonne. In 1955, he created the International Center for Genetic Epistemology, of which he served as director the rest of his life. And, in 1956, he created the School of Sciences at the University of Geneva.

He continued working on a general theory of structures and tying his psychological work to biology for many more years. Likewise, he continued his public service through UNESCO as a Swiss delegate. By the end of his career, he had written over 60 books and many hundreds of articles. He died in Geneva, September 16, 1980, one of the most significant psychologists of the twentieth century.
Theory

Jean Piaget began his career as a biologist -- specifically, a malacologist! But his interest in science and the history of science soon overtook his interest in snails and clams. As he delved deeper into the thought-processes of doing science, he became interested in the nature of thought itself, especially in the development of thinking. Finding relatively little work done in the area, he had the opportunity to give it a label. He called it **genetic epistemology**, meaning the study of the development of knowledge.

He noticed, for example, that even infants have certain skills in regard to objects in their environment. These skills were certainly simple ones, sensori-motor skills, but they directed the way in which the infant explored his or her environment and so how they gained more knowledge of the world and more sophisticated exploratory skills. These skills he called **schemas**.

For example, an infant knows how to grab his favorite rattle and thrust it into his mouth. He’s got that schema down pat. When he comes across some other object -- say daddy’s expensive watch, he easily learns to transfer his “grab and thrust” schema to the new object. This Piaget called **assimilation**, specifically assimilating a new object into an old schema.

When our infant comes across another object again -- say a beach ball -- he will try his old schema of grab and thrust. This of course works poorly with the new object. So the schema will adapt to the new object. Perhaps, in this example, “squeeze and drool” would be an appropriate title for the new schema. This is called **accommodation**, specifically accommodating an old schema to a new object.

Assimilation and accommodation are the two sides of **adaptation**, Piaget’s term for what most of us would call learning. Piaget saw adaptation, however, as a good deal broader than the kind of learning that Behaviorists in the US were talking about. He saw it as a fundamentally biological process. Even one’s grip has to accommodate to a stone, while clay is assimilated into our grip. All living things adapt, even without a nervous system or brain.

Assimilation and accommodation work like pendulum swings at advancing our understanding of the world and our competency in it. According to Piaget, they are directed at a balance between the structure of the mind and the environment, at a certain congruency between the two, that would indicate that you have a good (or at least good-enough) model of the universe. This ideal state he calls **equilibrium**.

As he continued his investigation of children, he noted that there were periods where assimilation dominated, periods where accommodation dominated, and periods of relative equilibrium, and that these periods were similar among all the children he looked at in their nature and their timing. And so he developed the idea of **stages** of cognitive development. These constitute a lasting contribution to psychology.
The sensorimotor stage

The first stage, to which we have already referred, is the sensorimotor stage. It lasts from birth to about two years old. As the name implies, the infant uses senses and motor abilities to understand the world, beginning with reflexes and ending with complex combinations of sensorimotor skills.

Between one and four months, the child works on primary circular reactions -- just an action of his own which serves as a stimulus to which it responds with the same action, and around and around we go. For example, the baby may suck her thumb. That feels good, so she sucks some more... Or she may blow a bubble. That's interesting so I'll do it again....

Between four and 12 months, the infant turns to secondary circular reactions, which involve an act that extends out to the environment: She may squeeze a rubber ducky. It goes "quack." That's great, so do it again, and again, and again. She is learning "procedures that make interesting things last."

At this point, other things begin to show up as well. For example, babies become ticklish, although they must be aware that someone else is tickling them or it won't work. And they begin to develop object permanence. This is the ability to recognize that, just because you can't see something doesn't mean it's gone! Younger infants seem to function by an "out of sight, out of mind" schema. Older infants remember, and may even try to find things they can no longer see.

Between 12 months and 24 months, the child works on tertiary circular reactions. They consist of the same "making interesting things last" cycle, except with constant variation. I hit the drum with the stick -- rat-tat-tat-tat. I hit the block with the stick -- thump-thump-thump. I hit the table with the stick -- clunk-clunk-clunk. I hit daddy with the stick -- ouch-ouch. This kind of active experimentation is best seen during feeding time, when discovering new and interesting ways of throwing your spoon, dish, and food.

Around one and a half, the child is clearly developing mental representation, that is, the ability to hold an image in their mind for a period beyond the immediate experience. For example, they can engage in deferred imitation, such as throwing a tantrum after seeing one an hour ago. They can use mental combinations to solve simple problems, such as putting down a toy in order to open a door. And they get good at pretending. Instead of using dollies essentially as something to sit at, suck on, or throw, now the child will sing to it, tuck it into bed, and so on.

Preoperational stage

The preoperational stage lasts from about two to about seven years old. Now that the child has mental representations and is able to pretend, it is a short step to the use of symbols.

A symbol is a thing that represents something else. A drawing, a written word, or a spoken word comes to be understood as representing a real dog. The use of language is, of course,
the prime example, but another good example of symbol use is **creative play**, wherein checkers are cookies, papers are dishes, a box is the table, and so on. By manipulating symbols, we are essentially thinking, in a way the infant could not: in the absence of the actual objects involved!

Along with symbolization, there is a clear understanding of past and future. For example, if a child is crying for its mother, and you say “Mommy will be home soon,” it will now tend to stop crying. Or if you ask him, “Remember when you fell down?” he will respond by making a sad face.

On the other hand, the child is quite **egocentric** during this stage, that is, he sees things pretty much from one point of view: his own! She may hold up a picture so only she can see it and expect you to see it too. Or she may explain that grass grows so she won’t get hurt when she falls.

Piaget did a study to investigate this phenomenon called the mountains study. He would put children in front of a simple plaster mountain range and seat himself to the side, then ask them to pick from four pictures the view that he, Piaget, would see. Younger children would pick the picture of the view they themselves saw; older kids picked correctly.

Similarly, younger children **center** on one aspect of any problem or communication at a time. For example, they may not understand you when you tell them “Your father is my husband.” Or they may say things like “I don’t live in the USA; I live in Pennsylvania!” Or, if you show them five black and three white marbles and ask them “Are there more marbles or more black marbles?” they will respond “More black ones!”
Perhaps the most famous example of the preoperational child’s centrism is what Piaget refers to as their inability to conserve liquid volume. If I give a three year old some chocolate milk in a tall skinny glass, and I give myself a whole lot more in a short fat glass, she will tend to focus on only one of the dimensions of the glass. Since the milk in the tall skinny glass goes up much higher, she is likely to assume that there is more milk in that one than in the short fat glass, even though there is far more in the latter. It is the development of the child’s ability to decenter that marks him as having moved to the next stage.

Concrete operations stage

The concrete operations stage lasts from about seven to about 11. The word operations refers to logical operations or principles we use when solving problems. In this stage, the child not only uses symbols representationally, but can manipulate those symbols logically. Quite an accomplishment! But, at this point, they must still perform these operations within the context of concrete situations.

The stage begins with progressive decentering. By six or seven, most children develop the ability to conserve number, length, and liquid volume. Conservation refers to the idea that a quantity remains the same despite changes in appearance. If you show a child four marbles in a row, then spread them out, the preoperational child will focus on the spread, and tend to believe that there are now more marbles than before.

Or if you have two five inch sticks laid parallel to each other, then move one of them a little, she may believe that the moved stick is now longer than the other.

The concrete operations child, on the other hand, will know that there are still four marbles, and that the stick doesn’t change length even though it now extends beyond the other. And he will know that you have to look at more than just the height of the milk in the glass: If you pour the mild from the short, fat glass into the tall, skinny glass, he will tell you that there is the same amount of milk as before, despite the dramatic increase in mild-level!
By seven or eight years old, children develop conservation of substance: If I take a ball of clay and roll it into a long thin rod, or even split it into ten little pieces, the child knows that there is still the same amount of clay. And he will know that, if you rolled it all back into a single ball, it would look quite the same as it did -- a feature known as reversibility.

By nine or ten, the last of the conservation tests is mastered: conservation of area. If you take four one-inch square pieces of felt, and lay them on a six-by-six cloth together in the center, the child who conserves will know that they take up just as much room as the same squares spread out in the corners, or, for that matter, anywhere at all.

If all this sounds too easy to be such a big deal, test your friends on conservation of mass: Which is heavier: a million tons of lead, or a million tons of feathers?

In addition, a child learns classification and seriation during this stage. Classification refers back to the question of whether there are more marbles or more black marbles? Now the child begins to get the idea that one set can include another. Seriation is putting things in order. The younger child may start putting things in order by, say size, but will quickly lose track. Now the child has no problem with such a task. Since arithmetic is essentially nothing more than classification and seriation, the child is now ready for some formal education!

**Formal operations stage**

But the concrete operations child has a hard time applying his new-found logical abilities to non-concrete -- i.e. abstract -- events. If mom says to junior "You shouldn't make fun of that boy's nose. How would you feel if someone did that to you?" he is likely to respond "I don't
have a big nose!” Even this simple lesson may well be too abstract, too hypothetical, for his kind of thinking.

Don’t judge the concrete operations child too harshly, though. Even adults are often taken-aback when we present them with something hypothetical: “If Edith has a lighter complexion than Susan, and Edith is darker than Lily, who is the darkest?” Most people need a moment or two.

From around 12 on, we enter the formal operations stage. Here we become increasingly competent at adult-style thinking. This involves using logical operations, and using them in the abstract, rather than the concrete. We often call this **hypothetical thinking**.

Here’s a simple example of a task that a concrete operations child couldn’t do, but which a formal operations teenager or adult could -- with a little time and effort. Consider this rule about a set of cards that have letters on one side and numbers on the other: “If a card has a vowel on one side, then it has an even number on the other side.” Take a look at the cards below and tell me, which cards do I need to turn over to tell if this rule is actually true? You’ll find the answer at the end of this chapter.

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E K 4 7
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It is the formal operations stage that allows one to investigate a problem in a careful and systematic fashion. Ask a 16 year old to tell you the rules for making pendulums swing quickly or slowly, and he may proceed like this:

- A long string with a light weight -- let’s see how fast that swings.
- A long string with a heavy weight -- let’s try that.
- Now, a short string with a light weight.
- And finally, a short string with a heavy weight.

His experiment -- and it is an experiment -- would tell him that a short string leads to a fast swing, and a long string to a slow swing, and that the weight of the pendulum means nothing at all!

The teenager has learned to group possibilities in four different ways:

- **By conjunction:** “Both A and B make a difference” (e.g. both the string’s length and the pendulum’s weight).
- **By disjunction:** “It’s either this or that” (e.g. it’s either the length or the weight).
By **implication**: “If it’s this, then that will happen” (the formation of a hypothesis).

By **incompatibility**: “When this happens, that doesn’t” (the elimination of a hypothesis).

On top of that, he can operate on the operations -- a higher level of grouping. If you have a proposition, such as “it could be the string or the weight,” you can do four things with it:

**Identity**: Leave it alone. “It could be the string or the weight.”

**Negation**: Negate the components and replace or’s with and’s (and vice versa). “It might not be the string and not the weight, either.”

**Reciprocity**: Negate the components but keep the and’s and or’s as they are. “Either it is not the weight or it is not the string.”

**Correlativity**: Keep the components as they are, but replace or’s with and’s, etc. “It’s the weight and the string.”

Someone who has developed his or her formal operations will understand that the correlate of a reciprocal is a negation, that a reciprocal of a negation is a correlate, that the negation of a correlate is a reciprocal, and that the negation of a reciprocal of a correlate is an identity (phew!!!).

Maybe it has already occurred to you. It doesn’t seem that the formal operations stage is something everyone actually gets to. Even those of us who do don’t operate in it at all times. Even some cultures, it seems, don’t develop it or value it like ours does. Abstract reasoning is simply not universal.

[Answer to the card question: The E and the 7. The E must have an even number on the back -- that much is obvious. the 7 is odd, so it cannot have a vowel on the other side -- that would be against the rule! But the rule says nothing about what has to be on the back of a consonant such as the K, nor does it say that the 4 **must** have a vowel on the other side!]
Humanistic Approach to Personality

Humanistic psychology is a psychological perspective which rose to prominence in the mid-20th century, drawing on the work of early pioneers like Carl Rogers and the philosophies of existentialism and phenomenology. It adopts a holistic approach to human existence through investigations of meaning, values, freedom, tragedy, personal responsibility, human potential, spirituality, and self-actualization.

Conceptual origins

The humanistic approach has its roots in phenomenological and existentialist thought (see Kierkegaard, Nietzsche, Heidegger, Merleau-Ponty and Sartre). Eastern philosophy and psychology also play a central role in humanistic psychology, as well as Judao-Christian philosophies of personalism, as each shares similar concerns about the nature of human existence and consciousness. (For further information on influential figures in personalism, see: Emmanuel Mounier, Gabriel Marcel, Denis de Rougemont, Jacques Maritain, Martin Buber, Emmanuel Levinas, Max Scheler, Karol Wojtyla, Borden Parker Browne, George H. Howison, Edgar Shieffield Brightman, Peter A. Bertocci, W. Gordon Allport, and Martin Luther King, Jr.)

It is also sometimes understood within the context of the three different forces of psychology: behaviorism, psychoanalysis and humanism. Behaviorism grew out of Ivan Pavlov's work with the conditioned reflex, and laid the foundations for academic psychology in the United States associated with the names of John B. Watson and B.F. Skinner. This school was later called the science of behavior. Abraham Maslow later gave behaviorism the name "the second force". The "first force" came out of Freud's research of psychoanalysis, and the psychologies of Alfred Adler, Erik Erikson, Carl Jung, Erich Fromm, Karen Horney, Otto Rank, Melanie Klein, Harry Stack Sullivan, and others. These theorists and practitioners, although basing their observations on extensive clinical data, primarily focused on the depth or "unconscious" aspects of human existence.

In the late 1950s, psychologists concerned with advancing a more holistic vision of psychology convened two meetings in Detroit, Michigan. These psychologists, including Abraham Maslow, Carl Rogers, and Clark Moustakas, were interested in founding a professional association dedicated to a psychology that focused on uniquely human issues, such as the self, self-actualization, health, hope, love, creativity, nature, being, becoming, individuality, and meaning—that is, a concrete understanding of human existence.

Development of the field

These preliminary meetings eventually led to other developments, which culminated in the description of humanistic psychology as a recognizable "third force" in psychology (along with behaviorism and psychoanalysis). Significant developments included the formation of the Association for Humanistic Psychology (AHP) in 1961 and the launch of the Journal of Humanistic Psychology (originally "The Phoenix") in 1961.
Subsequently, graduate programs in Humanistic Psychology at institutions of higher learning grew in number and enrollment. In 1971, humanistic psychology as a field was recognized by the American Psychological Association (APA) and granted its own division (Division 32) within the APA. Division 32 publishes its own academic journal called The Humanistic Psychologist.

The major theorists considered to have prepared the ground for Humanistic Psychology are Abraham Maslow, Carl Rogers and Rollo May. Maslow was heavily influenced by Kurt Goldstein during their years together at Brandeis University. Psychoanalytic writers also influenced humanistic psychology. Maslow himself famously acknowledged his "indebtendness to Freud" in Towards a Psychology of Being Other psychoanalytic influences include the work of Wilhelm Reich, who discussed an essentially 'good', healthy core self and Character Analysis (1933), and Carl Gustav Jung's mythological and archetypal emphasis. Other noteworthy inspirations for and leaders of the movement include Roberto Assagioli, Gordon Allport, Medard Boss, Martin Buber (close to Jacob L. Moreno), James Bugental, Victor Frankl, Erich Fromm, Hans-Werner Gessmann, Amedeo Giorgi, Kurt Goldstein, Sidney Jourard, R. D. Laing, Clark Moustakas, Lewis Mumford, Fritz Perls, Anthony Sutich, Thomas Szasz, Kirk J. Schneider, and Ken Wilber.

A human science view is not opposed to quantitative methods, but, following Edmund Husserl: 1) favors letting the methods be derived from the subject matter and not uncritically adopting the methods of natural science, and 2) advocates for methodological pluralism. Consequently, much of the subject matter of psychology lends itself to qualitative approaches (e.g., the lived experience of grief), and quantitative methods are mainly appropriate when something can be counted without leveling the phenomena (e.g., the length of time spent crying).

**Counseling and therapy**

Humanistic psychology includes several approaches to counseling and therapy. Among the earliest approaches we find the developmental theory of Abraham Maslow, emphasising a hierarchy of needs and motivations; the existential psychology of Rollo May acknowledging human choice and the tragic aspects of human existence; and the person-centered or client-centered therapy of Carl Rogers, which is centered on the clients' capacity for self-direction and understanding of his/her own development.

Other approaches to humanistic counseling and therapy include Gestalt therapy, humanistic psychotherapy, depth therapy, holistic health, encounter groups, sensitivity training, marital and family therapies, body work, and the existential psychotherapy of Medard Boss. Existential-integrative psychotherapy, developed by Kirk Schneider (2008), is a relatively new development within humanistic and existential therapy.

Self-help is also included in humanistic psychology: Sheila Ernst and Lucy Goodison have described using some of the main humanistic approaches in self-help groups. Co-counselling, which is a purely self-help approach, is regarded as coming within humanistic
psychology (see John Rowan’s Guide to Humanistic Psychology). Humanistic theory has had a strong influence on other forms of popular therapy, including Harvey Jackins' Re-evaluation Counselling and the work of Carl Rogers.

Humanistic psychology tends to look beyond the medical model of psychology in order to open up a nonpathologizing view of the person. This usually implies that the therapist downplays the pathological aspects of a person’s life in favour of the healthy aspects. A key ingredient in this approach is the meeting between therapist and client and the possibilities for dialogue. The aim of much humanistic therapy is to help the client approach a stronger and more healthy sense of self, also called self-actualization. All this is part of humanistic psychology’s motivation to be a science of human experience, focusing on the actual lived experience of persons.

**Humanistic psychology and social issues**

Although social transformation may not have been the primary focus in the past, a large percentage of contemporary humanistic psychologists currently investigate pressing social, cultural, and gender issues. Even the earliest writers who were associated with and inspired psychological humanism explored topics as diverse as the political nature of "normal" and everyday experience (RD Laing), the disintegration of the capacity to love in modern consumerist society (Erich Fromm), the growing technological dominance over human life (Medard Boss), and the question of evil (Rollo May-Carl Rogers debate). In addition, Maureen O’Hara, who worked with both Carl Rogers and Paulo Freire, has pointed to a convergence between the two thinkers given their distinct but mutually related focus on developing critical consciousness of situations which oppress and dehumanize.

**Criticism**

Critics of the field point out that it tends to ignore social change research. Isaac Prilleltensky, a self-described radical who champions community and feminist psychology, has argued for years that humanistic psychology inadvertently contributes to systemic injustice.

Further, it has been argued that the early incarnations of humanistic psychology lacked a cumulative empirical base, and the architects of the movement endorsed an "unembarrassed denial of human reciprocity and community." However, according to contemporary humanistic thinkers, humanistic psychology need not be understood to promote such ideas as narcissism, egotism, or selfishness.

The association of humanistic discourse with narcissistic and overly optimistic worldviews is a misreading of humanistic theory. In their response to Seligman & Csikszentmihalyi (2000), Bohart and Greening (2001) note that along with pieces on self-actualization and individual fulfillment, humanistic psychologists have also published papers on a wide range of social issues and topics, such as the promotion of international peace and understanding, awareness of the holocaust, the reduction of violence, and the promotion of social welfare and justice for all.
Criticisms that humanistic psychology lacks an “empirical base” have tended to rely on allegedly "restricted views" of what constitutes “empirical,” an uncritical adoption of natural science methods (as opposed to human science methods), and an outright neglect of Rogers’ own empirical work. To the contrary, humanistic psychology has a long history of empirical research, including but not limited to the work of Maslow, Amedeo Giorgi and David Elkins. In fact, humanistic psychology research traces its origins all the way back to American psychology pioneer William James' masterpiece, “Varieties of Religious Experience”

Kurt Goldstein

Kurt Goldstein (November 6, 1878 - September 19, 1965) was a German Jewish neurologist and psychiatrist who was a pioneer in modern neuropsychology. He created a holistic theory of the organism based on Gestalt theory which deeply influenced the development of Gestalt therapy. His most important book in German Der Aufbau des Organismus (1934) has been published again in English: The Organism (1995) with an introduction by Oliver Sacks.

Goldstein was co-editor of the Journal of Humanistic Psychology.

Biography

Kurt Goldstein was born in Katowice, Germany in 1878 into a large Jewish family. After his initial education at the gymnasium, he briefly studied philosophy at the University of Heidelberg before moving to the University of Breslau where he studied medicine. At Breslau, Goldstein served as a laboratory assistant to Ludwig Edinger and studied under Carl Wernicke. Goldstein ran a small neurology clinic, and after Edinger’s death, assumed the role of professor of neurology.

Following World War I, Goldstein took advantage of the large number of traumatic brain injuries at the clinic and established The Institute for Research into the Consequences of Brain Injuries. It was here that he developed his theory of brain-mind relationships.

In 1930, Goldstein accepted a position at the University of Berlin. In 1933, the Nazis came to power and Goldstein was arrested and imprisoned in a basement. After a week, he was released on the condition that he would agree to leave the country immediately and never return.

For the next year, he lived in Amsterdam, supported by the Rockefeller Foundation, and wrote his master opus, The Organism.

Goldstein emigrated to the USA in 1935 and became a citizen of the US in 1940. His wife Eva Rothmann was the daughter of Berlin neuroanatomist Max Rothmann.
Gestalt therapy

Gestalt therapy is an existential/experiential form of psychotherapy that emphasizes personal responsibility, and that focuses upon the individual's experience in the present moment, the therapist-client relationship, the environmental and social contexts of a person's life, and the self-regulating adjustments people make as a result of their overall situation.

Gestalt therapy was developed by Fritz Perls, Laura Perls and Paul Goodman in the 1940s and 1950s.

Overview

Edwin Nevis described Gestalt therapy as "a conceptual and methodological base from which helping professionals can craft their practice". In the same volume Joel Latner stated that Gestalt therapy is built upon two central ideas: that the most helpful focus of psychotherapy is the experiential present moment, and that everyone is caught in webs of relationships; thus, it is only possible to know ourselves against the background of our relationship to the other. The historical development of Gestalt therapy (described below) discloses the influences that generated these two ideas. Expanded, they support the four chief theoretical constructs (explained in the theory and practice section) that comprise Gestalt theory, and that guide the practice and application of Gestalt therapy.

Gestalt therapy was forged from various influences upon the lives of its founders during the times in which they lived, including: the new physics, Eastern religion, existential phenomenology, Gestalt psychology, psychoanalysis, experimental theatre, as well as systems theory and field theory. Gestalt therapy rose from its beginnings in the middle of the 20th century to rapid and widespread popularity during the decade of the 1960s and early 1970s. During the '70s and '80s Gestalt therapy training centers spread globally; but they were, for the most part, not aligned with formal academic settings. As the cognitive revolution eclipsed Gestalt theory in psychology, many came to believe Gestalt was an anachronism. Because Gestalt therapists disdained the positivism underlying what they perceived to be the concern of research, they largely ignored the need to utilize research to further develop Gestalt theory and Gestalt therapy practice. However, the new century has seen a sea change in attitudes toward research and Gestalt practice.

Gestalt therapy focuses on process (what is actually happening) as well as on content (what is being talked about). The emphasis is on what is being done, thought, and felt at the present moment (the phenomenality of both client and therapist), rather than on what was, might be, could be, or should have been. Gestalt therapy is a method of awareness practice (also called "mindfulness" in other clinical domains), by which perceiving, feeling, and acting are understood to be conducive to interpreting, explaining, and conceptualizing (the hermeneutics of experience). This distinction between direct experience versus indirect or secondary interpretation is developed in the process of therapy. The client learns to
become aware of what he or she is doing and that triggers the ability to risk a shift or change.

The objective of Gestalt therapy is to enable the client to become more fully and creatively alive and to become free from the blocks and unfinished business that may diminish satisfaction, fulfillment, and growth, and to experiment with new ways of being. For this reason Gestalt therapy falls within the category of humanistic psychotherapies. Because Gestalt therapy includes perception and the meaning-making processes by which experience forms, it can also be considered a cognitive approach. Because Gestalt therapy relies on the contact between therapist and client, and because a relationship can be considered to be contact over time, Gestalt therapy can be considered a relational or interpersonal approach. Because Gestalt therapy appreciates the larger picture which is the complex situation involving multiple influences in a complex situation, it can be considered a multi-systemic approach. Because the processes of Gestalt therapy are experimental, involving action, Gestalt therapy can be considered both a paradoxical and an experiential/experimental approach.

When Gestalt therapy is compared to other clinical domains, a person can find many matches, or points of similarity. "Probably the clearest case of consilience is between gestalt therapy's field perspective and the various organismic and field theories that proliferated in neuroscience, medicine, and physics in the early and mid-20th century. Within social science there is a consilience between gestalt field theory and systems or ecological psychotherapy; between the concept of dialogical relationship and object relations, attachment theory, client-centered therapy and the transference-oriented approaches; between the existential, phenomenological, and hermeneutical aspects of gestalt therapy and the constructivist aspects of cognitive therapy; and between gestalt therapy's commitment to awareness and the natural processes of healing and mindfulness, acceptance and Buddhist techniques adopted by cognitive behavioral therapy."

Contemporary theory and practice

Gestalt therapy theory essentially rests atop four "load-bearing walls": phenomenological method, dialogical relationship, field-theoretical strategies, and experimental freedom. Although all these tenets were present in the early formulation and practice of Gestalt therapy, as described in Ego, Hunger and Aggression (Perls, 1947) and in Gestalt Therapy, Excitement and Growth in the Human Personality (Perls, Hefferline, & Goodman, 1951), the early development of Gestalt therapy theory emphasized personal experience and the experiential episodes understood as "safe emergencies" or experiments. Indeed, half of the Perls, Hefferline, and Goodman book consists of such experiments. Later, through the influence of such people as Erving and Miriam Polster, a second theoretical emphasis emerged: namely, contact between self and other and ultimately the dialogical relationship between therapist and client. Later still, field theory emerged as an emphasis. At various times over the decades, since Gestalt therapy first emerged, one or more of these tenets and the associated constructs that go with them have captured the imagination of those who have continued developing the contemporary theory of Gestalt therapy. Since 1990 the literature focused upon Gestalt therapy has flourished, including the development of
several professional Gestalt journals. Along the way, Gestalt therapy theory has also been applied in Organizational Development and coaching work. And, more recently, Gestalt methods have been combined with meditation practices into a unified program of human development called Gestalt Practice, which is used by some practitioners.

**Phenomenological method**

The goal of a phenomenological exploration is awareness. This exploration works systematically to reduce the effects of bias through repeated observations and inquiry.

The phenomenological method comprises three steps: (1) the rule of epoché, (2) the rule of description, and (3) the rule of horizontalization. Applying the rule of epoché one sets aside one’s initial biases and prejudices in order to suspend expectations and assumptions. Applying the rule of description, one occupies oneself with describing instead of explaining. Applying the rule of horizontalization one treats each item of description as having equal value or significance.

The rule of epoché sets aside any initial theories with regard to what is presented in the meeting between therapist and client. The rule of description implies immediate and specific observations, abstaining from interpretations or explanations, especially those formed from the application of a clinical theory superimposed over the circumstances of experience. The rule of horizontalization avoids any hierarchical assignment of importance such that the data of experience become prioritized and categorized as they are received. A Gestalt therapist utilizing the phenomenological method might say something like, “I notice a slight tension at the corners of your mouth when I say that, and I see you shifting on the couch and folding your arms across your chest ... and now I see you rolling your eyes back”. Of course, the therapist may make a clinically relevant evaluation, but when applying the phenomenological method, temporarily suspends the need to express it.

**Dialogical relationship**

To create the conditions under which a dialogic moment might occur, the therapist attends to his or her own presence, creates the space for the client to enter in and become present as well (called inclusion), and commits him or herself to the dialogic process, surrendering to what takes place, as opposed to attempting to control it. With presence, the therapist judiciously “shows up” as a whole and authentic person, instead of assuming a role, false self or persona. The word 'judicious' used above refers to the therapist's taking into account the specific strengths, weaknesses and values. The only 'good' client is a 'live' client, so driving a client away by injudicious exposure of intolerable [to this client] experience of the therapist is obviously counter-productive. For example for an atheistic therapist to tell a devout client that religion is myth would not be useful, especially in the early stages of the relationship. To practice inclusion is to accept however the client chooses to be present, whether in a defensive and obnoxious stance or a superficially cooperative one. To practice inclusion is to support the presence of the client, including his or her resistance, not as a gimmick but in full realization that this is how the client is actually present and is the best this client can do at this time. Finally, the Gestalt therapist
is committed to the process, trusts in that process, and does not attempt to save him or herself from it (Brownell, in press, 2009, 2008)).

Field-theoretical strategies

“The field” can be considered in two ways. There are ontological dimensions and there are phenomenalological dimensions to one’s field. The phenomenalological dimensions are all those physical and environmental contexts in which we live and move. They might be the office in which one works, the house in which one lives, the city and country of which one is a citizen, and so forth. The ontological field is the objective reality that supports our physical existence. The ontological dimensions are all mental and physical dynamics that contribute to a person’s sense of self, one’s subjective experience - not merely elements of the environmental context. These might be the memory of an uncle’s inappropriate affection, one’s color blindness, one’s sense of the social matrix in operation at the office in which one works, and so forth. The way that Gestalt therapists choose to work with field dynamics makes what they do strategic. Gestalt therapy focuses upon character structure; according to Gestalt theory, the character structure is dynamic rather than fixed in nature. To become aware of one’s character structure, the focus is upon the phenomenalological dimensions in the context of the ontological dimensions.

Experimental freedom

Gestalt therapy is distinct because it moves toward action, away from mere talk therapy, and for this reason is considered an experiential approach. Through experiments, the therapist supports the client’s direct experience of something new, instead of merely talking about the possibility of something new. Indeed, the entire therapeutic relationship may be considered experimental, because at one level it is a corrective, relational experience for many clients, and it is a "safe emergency" that is free to turn out however it will. An experiment can also be conceived as a teaching method that creates an experience in which a client might learn something as part of their growth. Examples might include: (1) Rather than talking about the client’s critical parent, a Gestalt therapist might ask the client to imagine the parent is present, or that the therapist is the parent, and talk to that parent directly; (2) If a client is struggling with how to be assertive, a Gestalt therapist could either (a) have the client say some assertive things to the therapist or members of a therapy group, or (b) give a talk about how one should never be assertive; (3) A Gestalt therapist might notice something about the non-verbal behavior or tone of voice of the client; then the therapist might have the client exaggerate the non-verbal behavior and pay attention to that experience; (4) A Gestalt therapist might work with the breathing or posture of the client, and direct awareness to changes that might happen when the client talks about different content. With all these experiments the Gestalt therapist is working with process rather than content, the How rather than the What.

Noteworthy issues

Self
In field theory, self is a phenomenological concept, existing in comparison with other. Without the other there is no self, and how I experience the other is inseparable from how I experience the self. The continuity of selfhood (functioning personality) is something that is achieved in relationship, rather than something inherently "inside" the person. This can have its advantages and disadvantages. At one end of the spectrum, I may not have enough self-continuity to be able to make meaningful relationships, or to have a workable sense of who I am. In the middle, my personality is a loose set of ways of being that work for me, including commitments to relationships, work, culture and outlook, always open to change where I need to adapt to new circumstances or just want to try something new. At the other end, my personality is a rigid defensive denial of the new and spontaneous. I act in stereotyped ways, and either induce other people to act in particular and fixed ways towards me; or I redefine their actions to fit with fixed stereotypes.

In Gestalt therapy, the process is not about the self of the client being helped or healed by the fixed self of the therapist, rather it is an exploration of the co-creation of self and other in the here-and-now of the therapy. There is no assumption that the client will act in all other circumstances as he or she does in the therapy situation. However, the areas that cause problems will be either the lack of self definition leading to chaotic or psychotic behaviour, or the rigid self definition in some area of functioning that denies spontaneity and makes dealing with particular situations impossible. Both of these conditions show up very clearly in the therapy, and can be worked with in the relationship with the therapist.

The experience of the therapist is also very much part of the therapy. Since we co-create our self-other experiences, the way a therapist experiences being with a client is significant information about how the client experiences themselves. The proviso here is that a therapist is not operating from their own fixed responses. This is why Gestalt therapists are required to undertake significant therapy of their own during training.

From the perspective of this theory of self, neurosis can be seen as fixed predictability - a fixed Gestalt - and the process of therapy can be seen as facilitating the client to become unpredictable - more responsive to what is in the client’s present environment, rather than responding in a stuck way to past introjects or other learning. If the therapist has expectations of how the client should end up, this defeats the aim of therapy.

**Change**

In what has now become a "classic" of Gestalt therapy literature, Arnold Beisser described Gestalt’s paradoxical theory of change. The paradox is that the more one attempts to be who one is not, the more one remains the same. Conversely, when people identify with their current experience, the conditions of wholeness and growth support change. Put another way, change comes about as a result of "full acceptance of what is, rather than a striving to be different".

**Historical development**
Fritz Perls was a German-Jewish psychoanalyst who fled Europe with his wife Laura Perls to South Africa in order to escape Nazi oppression. After World War II the couple emigrated to New York City, which had become a center of intellectual, artistic and political experimentation by the late 1940s and early 1950s.

**Early influences**

Perls “grew up” on the bohemian scene in Berlin, participated in Expressionism and Dadaism, and experienced the turning of the artistic avant-garde toward the revolutionary left. Deployment to the front line, the trauma of war, anti-Semitism, intimidation, escape, and the Holocaust are further key sources of biographical influence.

Perls served in the German Army during World War I, and was wounded in the conflict. After the war he was educated as a medical doctor. He became an assistant to Kurt Goldstein, who worked with brain injured soldiers. Perls went through a psychoanalysis with Wilhelm Reich and became a psychiatrist. Perls assisted Goldstein at Frankfurt University where he met his wife Lore (Laura) Posner, who had earned a doctorate in Gestalt Psychology. They fled Nazi Germany in 1933 and settled in South Africa. Perls established a psychoanalytic training institute and joined the South African armed forces, serving as a military psychiatrist. During these years in South Africa Perls was influenced by Jan Smuts and his ideas about "holism".

In 1936 Fritz Perls attended a psychoanalyst’s conference in Marienbad, Czechoslovakia, where he presented a paper on oral resistances, mainly based on Laura Perls’ notes on breastfeeding their children. Perls’ paper was turned down. Perls did present his paper in 1936, but it met with "deep disapproval". Perls wrote his first book, Ego, Hunger and Aggression (1942, 1947), in South Africa, based in part on the rejected paper. It was later re-published in the United States. Laura Perls wrote two chapters of this book, but she was not given adequate recognition for her work.

**The seminal book**

Perls’ seminal work was Gestalt Therapy: Excitement and Growth in the Human Personality, published in 1951, co-authored by Fritz Perls, Paul Goodman, and Ralph Hefferline (a university psychology professor, and sometime patient of Fritz Perls). Most of the Part II of the book was written by Paul Goodman from Perls’ notes, and it contains the core of Gestalt theory. This part was supposed to go first. However, the publishers decided that Part I, written by Hefferline, fit into the nascent self-help ethos of the day, and they made it an introduction to the theory. Isadore From, a leading early theorist of Gestalt therapy, taught Goodman’s Part I for an entire year to his students, going through it phrase by phrase.

**First instances of Gestalt therapy**

Fritz and Laura founded the first Gestalt Institute in 1952, running it out of their Manhattan apartment. Isadore From became a patient, first of Fritz, and then Laura. Fritz soon made
Isadore a trainer, and also gave him some patients. Isadore lived in New York until his
death, at age 75, in 1993. He was known worldwide for his philosophical and intellectually
rigorous take on Gestalt therapy. A brilliant, witty and sometimes caustic man, From was
very much the philosopher of first-generation Gestalt therapists. Acknowledged as a
supremely gifted clinician, he was unfortunately indisposed to writing, so what remains of
his work are merely transcripts of interviews.

Of great importance to understanding the development of gestalt therapy is the early
training which took place in experiential groups in the Perls’ apartment, led by both Fritz
and Laura before Fritz left for the West Coast, and after by Laura alone. These ‘trainings’
were unstructured with little didactic input from the leaders, although many of the
principles were discussed in the monthly meetings of the institute, as well as at local bars
after the sessions. Many notable gestalt therapists emerged from these crucibles in addition
to Isidore From, e.g., Richard Kitzler, Dan Bloom, Bud Feder, Carl Hodges, Ruth Ronall, etc.
In these sessions both Fritz and Laura used some variation of the ‘hot seat’ method in
which the leader essentially works with one individual in front of an audience, with little or
no attention to group dynamics. In reaction to this omission emerged a more interactive
approach in which gestalt therapy principles were blended with group dynamics. Notably
in 1980 the book ‘Beyond the Hot Seat’, edited by Feder and Ronall, was published, with
contributions from members of both the NY and Cleveland Institutes, as well as others.

Fritz left Laura and New York in 1960, then briefly lived in Miami, and ended up in
California. Jim Simkin was a psychotherapist who became a client of Perls in New York, and
then a co-therapist with Perls in Los Angeles. Simkin was responsible for Perls coming to
California, where Perls began a psychotherapy practice. Ultimately, the life of a peripatetic
trainer and workshop leader was a better suited to Fritz’s personality. So, starting in 1963,
Simkin and Perls co-led some of the early Gestalt workshops and training groups at Esalen
Institute, in Big Sur, California, where Perls eventually settled and built a home. Jim Simkin
then purchased property next to Esalen. Simkin started his own training center, which he
ran until his death in 1984. Simkin refined his precise version of Gestalt therapy, training
psychologists, psychiatrists, counselors and social workers within a very rigorous
residential training model.

The schism

In the 1960s Perls became infamous among the professional elite for his public workshops
at Esalen Institute. Isadore From referred to some of Fritz’ brief workshops as "hit-and-
run" therapy, because of Perls’ alleged emphasis on showmanship with little or no follow-
through. But Perls never considered these workshops to be complete therapy. Rather, he
felt he was giving demonstrations of key points for a largely professional audience.
Unfortunately, some films and tapes of his work were all that most graduate students were
exposed to, along with the misperception that this was the entirety of Perls’ work.

When Fritz Perls left New York for California, there began to be a split with those who saw
gestalt therapy as a therapeutic approach similar to psychoanalysis. This view was
represented by Isadore From, who practiced and taught mainly in New York, as well as by
the members of the Cleveland Institute, which was co-founded by From. An entirely
different approach was taken, primarily in California, by those who saw Gestalt therapy not
just as a therapeutic modality, but as a way of life. The East Coast, New York-Cleveland axis
was often appalled by the notion of Gestalt therapy leaving the consulting room and
becoming a way-of-life on the West Coast in the 1960s (see the "Gestalt prayer"). An
alternate view of this split saw Perls in his last years continuing to develop his a-theoretical
and phenomenological methodology, while others, inspired by From, were inclined to
theoretical rigor which verged on replacing experience with ideas.

The split continues between what has been called "East Coast Gestalt" and "West Coast
Gestalt", at least from a US-centric point of view. While the communitarian form of Gestalt
continues to flourish, Gestalt therapy was largely replaced in the United States by Cognitive
Behavioral Therapy, and many Gestalt therapists in the U.S. drifted toward organizational
management and coaching. At the same time, contemporary Gestalt Practice was developed
by Dick Price, the co-founder of Esalen Institute. Price was Perls’ primary student at Esalen.
Gestalt workshops are still offered at Esalen. Price’s widow, Christine Stewart Price,
continues to lead Gestalt workshops there. And many Gestalt practititoners continue to be
instructed by the life and teachings of Dick Price.

Post-Perls

In 1969 Fritz Perls left the United States to start a Gestalt community at Lake Cowichan on
Vancouver Island, Canada. He died almost a year later, on 14 March 1970, in Chicago. One
member of the Gestalt community was Barry Stevens. Her book about that phase of her life,
Don’t Push the River, became very popular. She developed her own form of Gestalt therapy
body work, which is essentially a concentration on the awareness of body processes.

The Polsters

Erving and Miriam Polster started a training center in La Jolla, California, which also
became very well known, as did their book, Gestalt Therapy Integrated, in the 1970s.

The Polsters played an influential role in advancing the concept of contact boundary
phenomena. The standard contact boundary resistances in Gestalt theory were confluence,
introjection, projection and retroflection. A disturbance described by Miriam and Erving
Polster was "deflection", which referred to a means of avoiding contact. Instances of
boundary phenomena can have pathological or non-pathological aspects. For example, it is
appropriate for an infant and mother to merge, or become "confluent", but inappropriate
for a client and therapist. If the latter become confluent, there can be no growth, because
there is no boundary at which one can contact the other. The client will not be able to learn
anything new because the therapist essentially becomes an extension of the client.

Influences upon Gestalt therapy

Some examples
There were a variety of psychological and philosophical influences upon the development of Gestalt therapy; not the least of which were the social forces at the time and place of its inception. Gestalt therapy is an approach that is holistic (including mind, body and culture). It is present-centered and related to existential therapy in its emphasis on personal responsibility for action, and on the value of "I-thou" relationship in therapy. In fact, Perls considered calling Gestalt therapy existential-phenomenological therapy. "The I and thou in the Here and Now", was a semi-humorous short-hand mantra for Gestalt therapy.

Both Fritz and Laura Perls were students and admirers of the neuropsychiatrist Kurt Goldstein. Gestalt therapy was based in part on Goldstein's concept called "Organismic theory". Goldstein viewed a person in terms of a holistic and unified experience. He encouraged a "big picture" perspective, taking in to account the whole context of a person's experience. The word Gestalt means whole, or configuration. Goldstein taught Perls that self actualization could only be achieved by self transcendence, that is, viewing the self as part of a greater whole. Laura Perls, in an interview, denotes the "Organismic theory" as the base of Gestalt therapy.

There were additional influences on Gestalt therapy from existentialism, particularly the I-thou relationship as it applies to therapy, and the notion of personal choice and responsibility.

The late 1950s–1960s movement toward personal growth and the human potential movement in California fed into, and was itself influenced by Gestalt therapy. In this process Gestalt therapy somehow became a "coherent Gestalt", which is the Gestalt psychology term for a perceptual unit that holds together and forms a unified whole.

**Psychoanalysis**

Fritz Perls trained as a neurologist at major medical institutions and as a Freudian psychoanalyst in Berlin and Vienna, the most important international centers of the discipline in his day. He worked as a training analyst for several years with the official recognition of the International Psychoanalytic Association (IPA) and must be considered an experienced clinician. Gestalt therapy was influenced by psychoanalysis. It was part of a continuum moving from the early work of Freud, to the later Freudian ego analysis, to Wilhelm Reich and his character analysis and notion of character armor, with attention to nonverbal behavior. This was consonant with Laura Perls' background in dance and movement therapy. To this was added the insights of academic Gestalt psychology, including perception, Gestalt formation and the tendency of organisms to complete an incomplete Gestalt, and to form "wholes" in experience.

Central to Fritz and Laura Perls' modifications of psychoanalysis was the concept of "dental or oral aggression". In Ego, Hunger and Aggression (1947), Fritz Perls' first book, to which Laura Perls contributed (ultimately without recognition), Perls suggested that when the infant develops teeth, he or she has the capacity to chew, to break apart food, and by analogy to experience, to taste, accept, reject or assimilate. This was opposed to Freud's notion that only introjection takes place in early experience. Thus Perls made
"assimilation", as opposed to "introjection", a focal theme in his work, and the prime means by which growth occurs in therapy.

In contrast to the psychoanalytic stance, in which the "patient" introjects the (presumably more healthy) interpretations of the analyst, in Gestalt therapy the client must "taste" his or her experience, and either accept or reject it, but not introject or "swallow whole". Hence, the emphasis is on avoiding interpretation, and instead encouraging discovery. This is the key point in the divergence of Gestalt therapy from traditional psychoanalysis — growth occurs through gradual assimilation of experience in a natural way, rather than by accepting the interpretations of the analyst; thus, the therapist should not interpret, but lead the client to discover for himself or herself.

The Gestalt therapist contrives experiments that lead the client to greater awareness and fuller experience of his or her possibilities. Experiments can be focussed on undoing projections or retroflections. The therapist can work to help the client with closure of unfinished Gestalts ("unfinished business" such as unexpressed emotions towards somebody in the client's life). There are many kinds of experiments that might be therapeutic. But the essence of the work is that it is experiential rather than interpretive, and in this way Gestalt therapy distinguishes itself from psychoanalysis.

**Principal influences: A summary list**

- Otto Rank's invention of "here-and-now" therapy and Rank's post-Freudian book *Art and Artist* (1932), both of which strongly influenced Paul Goodman.
- Wilhelm Reich's psychoanalytic developments, especially his early character analysis, the later concept of character armor and its focus on the body.
- Jacob Moreno's Psychodrama, principally the development of enactment techniques for the resolution of psychological conflicts.
- Kurt Goldstein's holistic theory of the organism, based on Gestalt theory.
- Martin Buber's philosophy of relationship and dialogue ("I - Thou").
- Kurt Lewin's field theory as applied to the social sciences and group dynamics.
- European phenomenology of Franz Brentano, Edmund Husserl, Martin Heidegger, and Maurice Merleau-Ponty.
- The existentialism of Kierkegaard over that of Sartre, rejecting nihilism.
- Carl Jung's psychology, particularly the polarities concept.
- Some elements from Zen Buddhism.
- Differentiation between thing and concept from Zen and the works of Alfred Korzybski.
- The American pragmatism of William James, George Herbert Mead, and John Dewey.

**Current status**

Gestalt therapy reached a zenith in the United States in the late 1970s and early 1980s. Since then it has influenced other fields like organisational development, coaching, and teaching. Many of its contributions have become assimilated into other current schools of therapy.
Gestalt therapy continues to thrive as a widespread form of psychotherapy, especially throughout Europe, where there are many practitioners and training institutions.

The form of Gestalt Practice initially developed at Esalen Institute by Dick Price has spawned numerous offshoots. The most important is now called Gestalt Awareness Practice by Price’s wife and collaborator, Christine Stewart Price. She teaches this mode of practice in California, throughout the United States, as well as in Japan.

**Training of Gestalt therapists**

**Pedagogical approach**

Many Gestalt therapy training organizations exist worldwide. Ansel Woldt asserted that Gestalt teaching and training are built upon the belief that people are, by nature, health seeking. Thus, such commitments as authenticity, optimism, holism, health, and trust become important principles to consider when engaged in the activity of teaching and learning - especially Gestalt therapy theory and practice.

**Associations**

The Association for the Advancement of Gestalt Therapy, (AAGT) holds a biennial international conference in various locations – the first was in New Orleans, in 1995. Subsequent conferences have been held in San Francisco, Cleveland, New York, Dallas, St. Pete’s Beach, Vancouver (British Columbia), Manchester (England), and Philadelphia. In addition, the AAGT holds regional conferences, and its regional network has spawned regional conferences in Amsterdam, the Southwest and the Southeast of the United States, England, and Australia. Its Research Task Force generates and nurtures active research projects and an international conference on research.

The European Association for Gestalt Therapy (EAGT) founded in 1985, to gather European individual Gestalt therapists, training institutes and national associations, from more than 20 European nations.

Gestalt Australia and New Zealand (GANZ) was formally established at the first "Down Under" Gestalt Therapy Conference held in Perth in September 1998.
Carl Rogers

Carl Ransom Rogers (January 8, 1902 – February 4, 1987) was an influential American psychologist and among the founders of the humanistic approach to psychology. Rogers is widely considered to be one of the founding fathers of psychotherapy research and was honored for his pioneering research with the Award for Distinguished Scientific Contributions by the American Psychological Association in 1956.

The person-centered approach, his own unique approach to understanding personality and human relationships, found wide application in various domains such as psychotherapy and counseling (client-centered therapy), education (student-centered learning), organizations, and other group settings. For his professional work he was bestowed the Award for Distinguished Professional Contributions to Psychology by the APA in 1972. Towards the end of his life Carl Rogers was nominated for the Nobel Peace Prize for his work with national intergroup conflict in South Africa and Northern Ireland. In an empirical study by Haggbloom et al. (2002) using six criteria such as citations and recognition, Rogers was found to be the sixth most eminent psychologist of the 20th century and second, among clinicians, only to Sigmund Freud.

Biography
Rogers was born on January 8, 1902, in Oak Park, Illinois, a Chicago suburb. His father Walter A. Rogers was a civil engineer and his mother, Julia M. Cushing, was a housewife and devout Pentecostal Christian. Carl was the fourth of their six children.

Rogers was quite smart and could read well before kindergarten. Following an education in a strict religious vicarage of Jimpley and ethical environment as an altar boy, he became a rather isolated, independent and disciplined person, and acquired a knowledge and an appreciation for the scientific method in a practical world. His first career choice was agriculture, at the University of Wisconsin–Madison, followed by history and then religion. At age 20, following his 1922 trip to Peking, China, for an international Christian conference, he started to doubt his religious convictions. To help him clarify his career choice, he attended a seminar entitled Why am I entering the Ministry?, after which he decided to change his career.

After two years he left the seminary to attend Teachers College, Columbia University, obtaining an MA in 1928 and a PhD in 1931. While completing his doctoral work, he engaged in child study. In 1930, Rogers served as director of the Society for the Prevention of Cruelty to Children in Rochester, New York. From 1935 to 1940 he lectured at the University of Rochester and wrote The Clinical Treatment of the Problem Child (1939), based on his experience in working with troubled children. He was strongly influenced in constructing his client-centered approach by the post-Freudian psychotherapeutic practice of Otto Rank. In 1940 Rogers became professor of clinical psychology at Ohio State University, where he wrote his second book, Counseling and Psychotherapy (1942). In it, Rogers suggested that the client, by establishing a relationship with an understanding, accepting therapist, can resolve difficulties and gain the insight necessary to restructure their life.

In 1945, he was invited to set up a counseling center at the University of Chicago. While a professor of psychology at the University of Chicago (1945–57), Rogers helped to establish a counseling centre connected with the university and there conducted studies to determine the effectiveness of his methods. His findings and theories appeared in Client-Centered Therapy (1951) and Psychotherapy and Personality Change (1954). One of his graduate students at the University of Chicago, Thomas Gordon, established the Parent Effectiveness Training (P.E.T.) movement. In 1956, Rogers became the first President of the American Academy of Psychotherapists. He taught psychology at the University of Wisconsin, Madison (1957–63), during which time he wrote one of his best-known books, On Becoming a Person (1961). He was elected a Fellow of the American Academy of Arts and Sciences in 1961.

Rogers continued teaching at University of Wisconsin until 1963, he became a resident at the new Center for Studies of the Person in La Jolla. Rogers left the WBSI to help found the Center for Studies of the Person in 1968. His later books include Carl Rogers on Personal Power (1977) and Freedom to Learn for the 80’s (1983). He remained a resident of La Jolla for the rest of his life, doing therapy, giving speeches and writing until his sudden death in 1987. In 1987, Rogers suffered a fall that resulted in a fractured pelvis. He had a successful operation, but his pancreas failed the next night and he died a few days later.
Rogers' last years were devoted to applying his theories in situations of political oppression and national social conflict, and he traveled worldwide to accomplish this. In Belfast, Northern Ireland, he brought together influential Protestants and Catholics; in South Africa, blacks and whites; in Brazil people emerging from dictatorship to democracy in the United States, consumers and providers in the health field. His last trip, at age 85, was to the Soviet Union, where he lectured and facilitated intensive experiential workshops fostering communication and creativity. He was astonished at the numbers of Russians who knew of his work.

Together with his daughter, Natalie Rogers, and psychologists Maria Bowen, Maureen O'Hara, and John K. Wood, between 1974 and 1984, Rogers convened a series of residential programs in the US, Europe, Brazil and Japan, the Person-Centered Approach Workshops, which focused on cross-cultural communications, personal growth, self-empowerment, and learning for social change. Rogers was nominated for the Nobel Peace prize for his work though the nomination arrived just days after his death.

Theory

Rogers' theory of the self is considered to be humanistic and phenomenological. His theory is based directly on the "phenomenal field" personality theory of Combs and Snygg (1949). Rogers' elaboration of his own theory is extensive. He wrote 16 books and many more journal articles describing it. However, Prochaska and Norcross (2003) states Rogers "consistently stood for an empirical evaluation of psychotherapy. He and his followers have demonstrated a humanistic approach to conducting therapy and a scientific approach to evaluating therapy need not be incompatible."

Carl Rogers applied his experiences with adult therapy to the education process and developed the concept of learner-centered teaching. He had the following five hypotheses regarding learner-centered education:

- "A person cannot teach another person directly; a person can only facilitate another's learning" (Rogers, 1951). This is a result of his personality theory, which states that everyone exists in a constantly changing world of experience in which he or she is the center. Each person reacts and responds based on perception and experience. The belief is that what the student does is more important than what the teacher does. The focus is on the student (Rogers, 1951). Therefore, the background and experiences of the learner are essential to how and what is learned. Each student will process what he or she learns differently depending on what he or she brings to the classroom.

- "A person learns significantly only those things that are perceived as being involved in the maintenance of or enhancement of the structure of self" (Rogers, 1951). Therefore, relevancy to the student is essential for learning. The students' experiences become the core of the course.
“Experience which, if assimilated, would involve a change in the organization of self, tends to be resisted through denial or distortion of symbolism” (Rogers, 1951). If the content or presentation of a course is inconsistent with preconceived information, the student will learn if he or she is open to varying concepts. Being open to consider concepts that vary from one's own is vital to learning. Therefore, gently encouraging open-mindedness is helpful in engaging the student in learning. Also, it is important, for this reason, that new information is relevant and related to existing experience.

“The structure and organization of self appears to become more rigid under threats and to relax its boundaries when completely free from threat” (Rogers, 1951). If students believe that concepts are being forced upon them, they might become uncomfortable and fearful. A barrier is created by a tone of threat in the classroom. Therefore, an open, friendly environment in which trust is developed is essential in the online classroom. Fear of retribution for not agreeing with a concept should be eliminated. A classroom tone of support helps to alleviate fears and encourages students to have the courage to explore concepts and beliefs that vary from those they bring to the classroom. Also, new information might threaten the student's concept of him- or herself; therefore, the less vulnerable the student feels, the more likely he or she will be able to open up to the learning process.

“The educational situation which most effectively promotes significant learning is one in which (a) threat to the self of the learner is reduced to a minimum and (b) differentiated perception of the field is facilitated” (Rogers, 1951). The instructor should be open to learning from the students and also working to connect the students to the subject matter. Frequent interaction with the students will help achieve this goal. The instructor's acceptance of being a mentor who guides rather than the expert who tells is instrumental to student-centered, nonthreatening, and unforced learning.

**Nineteen propositions**

His theory (as of 1951) was based on 19 propositions:

1. All individuals (organisms) exist in a continually changing world of experience (phenomenal field) of which they are the center.
2. The organism reacts to the field as it is experienced and perceived. This perceptual field is "reality" for the individual.
3. The organism reacts as an organized whole to this phenomenal field.
4. A portion of the total perceptual field gradually becomes differentiated as the self.
5. As a result of interaction with the environment, and particularly as a result of evaluational interaction with others, the structure of the self is formed - an organized, fluid but consistent conceptual pattern of perceptions of characteristics and relationships of the "I" or the "me", together with values attached to these concepts.
6. The organism has one basic tendency and striving - to actualize, maintain and enhance the experiencing organism.
7. The best vantage point for understanding behavior is from the internal frame of reference of the individual.
8. Behavior is basically the goal-directed attempt of the organism to satisfy its needs as experienced, in the field as perceived.
9. Emotion accompanies, and in general facilitates, such goal directed behavior, the kind of emotion being related to the perceived significance of the behavior for the maintenance and enhancement of the organism.
10. The values attached to experiences, and the values that are a part of the self-structure, in some instances, are values experienced directly by the organism, and in some instances are values introjected or taken over from others, but perceived in distorted fashion, as if they had been experienced directly.
11. As experiences occur in the life of the individual, they are either, a) symbolized, perceived and organized into some relation to the self, b) ignored because there is no perceived relationship to the self structure, c) denied symbolization or given distorted symbolization because the experience is inconsistent with the structure of the self.
12. Most of the ways of behaving that are adopted by the organism are those that are consistent with the concept of self.
13. In some instances, behavior may be brought about by organic experiences and needs which have not been symbolized. Such behavior may be inconsistent with the structure of the self but in such instances the behavior is not "owned" by the individual.
14. Psychological adjustment exists when the concept of the self is such that all the sensory and visceral experiences of the organism are, or may be, assimilated on a symbolic level into a consistent relationship with the concept of self.
15. Psychological maladjustment exists when the organism denies awareness of significant sensory and visceral experiences, which consequently are not symbolized and organized into the gestalt of the self structure. When this situation exists, there is a basic or potential psychological tension.
16. Any experience which is inconsistent with the organization of the structure of the self may be perceived as a threat, and the more of these perceptions there are, the more rigidly the self structure is organized to maintain itself.
17. Under certain conditions, involving primarily complete absence of threat to the self structure, experiences which are inconsistent with it may be perceived and examined, and the structure of self revised to assimilate and include such experiences.
18. When the individual perceives and accepts into one consistent and integrated system all his sensory and visceral experiences, then he is necessarily more understanding of others and is more accepting of others as separate individuals.
19. As the individual perceives and accepts into his self structure more of his organic experiences, he finds that he is replacing his present value system - based extensively on introjections which have been distortedly symbolized - with a continuing organismic valuing process.

Additionally, Rogers is known for practicing "unconditional positive regard," which is defined as accepting a person "without negative judgment of .... [a person's] basic worth."
Development of the personality

With regard to development, he described principles rather than stages. The main issue is the development of a self concept and the progress from an undifferentiated self to being fully differentiated.

**Self Concept** ... the organized consistent conceptual gestalt composed of perceptions of the characteristics of 'I' or 'me' and the perceptions of the relationships of the 'I' or 'me' to others and to various aspects of life, together with the values attached to these perceptions. It is a gestalt which is available to awareness though not necessarily in awareness. It is a fluid and changing gestalt, a process, but at any given moment it is a specific entity. (Rogers, 1959)

In the development of the self concept, he saw conditional and unconditional positive regard as key. Those raised in an environment of unconditional positive regard have the opportunity to fully actualize themselves. Those raised in an environment of conditional positive regard feel worthy only if they match conditions (what Rogers describes as conditions of worth) that have been laid down for them by others.

The fully functioning person

Optimal development, as referred to in proposition 14, results in a certain process rather than static state. He describes this as the good life, where the organism continually aims to fulfill its full potential. He listed the characteristics of a fully functioning person (Rogers 1961):

- **A growing openness to experience** – they move away from defensiveness and have no need for subjection (a perceptual defense that involves unconsciously applying strategies to prevent a troubling stimulus from entering consciousness).
- **An increasingly existential lifestyle** – living each moment fully – not distorting the moment to fit personality or self concept but allowing personality and self concept to emanate from the experience. This results in excitement, daring, adaptability, tolerance, spontaneity, and a lack of rigidity and suggests a foundation of trust. "To open one's spirit to what is going on now, and discover in that present process whatever structure it appears to have" (Rogers 1961)
- **Increasing organismic trust** – they trust their own judgment and their ability to choose behavior that is appropriate for each moment. They do not rely on existing codes and social norms but trust that as they are open to experiences they will be able to trust their own sense of right and wrong.
- **Freedom of choice** – not being shackled by the restrictions that influence an incongruent individual, they are able to make a wider range of choices more fluently. They believe that they play a role in determining their own behavior and so feel responsible for their own behavior.
- **Creativity** – it follows that they will feel more free to be creative. They will also be more creative in the way they adapt to their own circumstances without feeling a need to conform.
- **Reliability and constructiveness** – they can be trusted to act constructively. An individual who is open to all their needs will be able to maintain a balance between them. Even aggressive needs will be matched and balanced by intrinsic goodness in congruent individuals.
- **A rich full life** – he describes the life of the fully functioning individual as rich, full and exciting and suggests that they experience joy and pain, love and heartbreak, fear and courage more intensely. Rogers’ description of the good life:

This process of the good life is not, I am convinced, a life for the faint-hearted. It involves the stretching and growing of becoming more and more of one’s potentialities. It involves the courage to be. It means launching oneself fully into the stream of life. (Rogers 1961)

**Incongruence**

Rogers identified the "real self" as the aspect of one's being that is founded in the actualizing tendency, follows organismic valuing, needs and receives positive regard and self-regard. It is the "you" that, if all goes well, you will become. On the other hand, to the extent that our society is out of sync with the actualizing tendency, and we are forced to live with conditions of worth that are out of step with organismic valuing, and receive only conditional positive regard and self-regard, we develop instead an "ideal self". By ideal, Rogers is suggesting something not real, something that is always out of our reach, the standard we cannot meet. This gap between the real self and the ideal self, the "I am" and the "I should" is called incongruity.

**Psychopathology**

Rogers described the concepts of congruence and incongruence as important ideas in his theory. In proposition #6, he refers to the actualizing tendency. At the same time, he recognized the need for positive regard. In a fully congruent person realizing their potential is not at the expense of experiencing positive regard. They are able to lead lives that are authentic and genuine. Incongruent individuals, in their pursuit of positive regard, lead lives that include falseness and do not realize their potential. Conditions put on them by those around them make it necessary for them to forego their genuine, authentic lives to meet with the approval of others. They live lives that are not true to themselves, to who they are on the inside.

Rogers suggested that the incongruent individual, who is always on the defensive and cannot be open to all experiences, is not functioning ideally and may even be malfunctioning. They work hard at maintaining/protecting their self concept. Because their lives are not authentic this is a difficult task and they are under constant threat. They deploy defense mechanisms to achieve this. He describes two mechanisms: distortion and
denial. Distortion occurs when the individual perceives a threat to their self concept. They distort the perception until it fits their self concept.

This defensive behavior reduces the consciousness of the threat but not the threat itself. And so, as the threats mount, the work of protecting the self concept becomes more difficult and the individual becomes more defensive and rigid in their self structure. If the incongruence is immoderate this process may lead the individual to a state that would typically be described as neurotic. Their functioning becomes precarious and psychologically vulnerable. If the situation worsens it is possible that the defenses cease to function altogether and the individual becomes aware of the incongruence of their situation. Their personality becomes disorganised and bizarre; irrational behavior, associated with earlier denied aspects of self, may erupt uncontrollably.

Applications

Rogers originally developed his theory to be the foundation for a system of therapy. He initially called this "non-directive therapy" but later replaced the term "non-directive" with the term "client-centered" and then later used the term "person-centered". The first empirical evidence of the effectiveness of the client-centered approach was published in 1941 at the Ohio State University by Elias Porter, using the recordings of therapeutic sessions between Carl Rogers and his clients., Porter used Rogers' transcripts to devise a system to measure the degree of directiveness or non-directiveness a counselor employed. The attitude and orientation of the counselor were demonstrated to be instrumental in the decisions made by the client.

Even before the publication of Client-Centered Therapy in 1951, he believed that the principles he was describing could be applied in a variety of contexts and not just in the therapy situation. As a result he started to use the term person-centered approach later in his life to describe his overall theory.

Person-centered therapy is the application of the person-centered approach to the therapy situation. Other applications include a theory of personality, interpersonal relations, education, nursing, cross-cultural relations and other "helping" professions and situations.

In 1970, Richard Young, Alton Becker, and Kenneth Pike published Rhetoric: Discovery and Change, a widely influential college writing textbook that used a Rogerian approach to communication to revise the traditional Aristotelian framework for rhetoric.

The application to education has a large robust research tradition similar to that of therapy with studies having begun in the late 1930s and continuing today (Cornelius-White, 2007). Rogers described the approach to education in Client-Centered Therapy and wrote Freedom to Learn devoted exclusively to the subject in 1969. Freedom to Learn was revised two times. The new Learner-Centered Model is similar in many regards to this classical person-centered approach to education.
The application to cross-cultural relations has involved workshops in highly stressful situations and global locations including conflicts and challenges in South Africa, Central America, and Ireland. This work resulted in a Nobel Peace Prize nomination for Rogers.

**Person-centered therapy**

Person-centered therapy (PCT) is also known as person-centered psychotherapy, person-centered counselling, client-centered therapy and Rogerian psychotherapy. PCT is a form of talk-psychotherapy developed by psychologist Carl Rogers in the 1940s and 1950s. It is one of the most widely used models in mental health and psychotherapy. In this technique, therapists create a comfortable, non-judgmental environment by demonstrating congruence (genuineness), empathy, and unconditional positive regard toward their patients while using a non-directive approach. This aids patients in finding their own solutions to their problems.

PCT is predominantly used by psychologists and counselors in psychotherapy. The therapist’s role is that of a facilitator and to provide a therapeutic relationship. The therapist does not treat any illness.

Although this technique has been criticized by behaviorists for lacking structure and by psychoanalysts for actually providing a conditional relationship it has proven to be a vastly effective and popular treatment.

**History and influences**

Person-centred therapy, now considered a founding work in the humanistic school of psychotherapies, began formally with Carl Rogers. "Rogerian" psychotherapy is identified as one of the major school groups, along with psychodynamic, psychoanalytic (most famously Sigmund Freud), Adlerian, Cognitive-behavioral therapy, and Existential therapy (such as that pioneered by Rollo May).

Others acknowledge Rogers’ broad influence on approach, while naming a humanistic or humanistic-existentialist school group; there is large debate over what constitute major schools and cross-influences with more tangential candidates such as feminist, Gestalt, British school, self psychology, interpersonal, family systems, integrative, systemic and communicative, with several historical influences seeding them such as object-relations.

Rogers affirmed individual personal experience as the basis and standard for living and therapeutic effect. Rogers identified 6 conditions which are needed to produce personality changes in clients: relationship, vulnerability to anxiety (on the part of the client), genuineness (the therapist is truly himself or herself and incorporates some self-disclosure), the client’s perception of the therapist’s genuineness, the therapist’s unconditional positive regard for the client, and accurate empathy. This emphasis contrasts with the dispassionate position which may be intended in other therapies, particularly the more extreme behavioral therapies. Living in the present rather than the past or future,
with organismic trust, naturalistic faith in your own thoughts and the accuracy in your feelings, and a responsible acknowledgment of your freedom, with a view toward participating fully in our world, contributing to other peoples’ lives, are hallmarks of Roger’s Person-centred therapy.

Core concepts

Rogers (1957; 1959) stated that there are six necessary and sufficient conditions required for therapeutic change:

- **Therapist-Client Psychological Contact**: a relationship between client and therapist must exist, and it must be a relationship in which each person’s perception of the other is important.
- **Client incongruence, or Vulnerability**: that incongruence exists between the client’s experience and awareness. Furthermore, the client is vulnerable to anxiety which motivates them to stay in the relationship.
- **Therapist Congruence, or Genuineness**: the therapist is congruent within the therapeutic relationship. The therapist is deeply involved him or herself - they are not "acting" - and they can draw on their own experiences (self-disclosure) to facilitate the relationship.
- **Therapist Unconditional Positive Regard (UPR)**: the therapist accepts the client unconditionally, without judgment, disapproval or approval. This facilitates increased self-regard in the client, as they can begin to become aware of experiences in which their view of self-worth was distorted by others.
- **Therapist Empathic understanding**: the therapist experiences an empathic understanding of the client’s internal frame of reference. Accurate empathy on the part of the therapist helps the client believe the therapist’s unconditional love for them.
- **Client Perception**: that the client perceives, to at least a minimal degree, the therapist’s UPR and empathic understanding.
CARL ROGERS: Summarized

1902 - 1987

Dr. C. George Boeree

Biography

Carl Rogers was born January 8, 1902 in Oak Park, Illinois, a suburb of Chicago, the fourth of six children. His father was a successful civil engineer and his mother was a housewife and devout Christian. His education started in the second grade, because he could already read before kindergarten.

When Carl was 12, his family moved to a farm about 30 miles west of Chicago, and it was here that he was to spend his adolescence. With a strict upbringing and many chores, Carl was to become rather isolated, independent, and self-disciplined.

He went on to the University of Wisconsin as an agriculture major. Later, he switched to religion to study for the ministry. During this time, he was selected as one of ten students to go to Beijing for the “World Student Christian Federation Conference” for six months. He tells us that his new experiences so broadened his thinking that he began to doubt some of his basic religious views.

After graduation, he married Helen Elliot (against his parents’ wishes), moved to New York City, and began attending the Union Theological Seminary, a famous liberal religious institution. While there, he took a student organized seminar called “Why am I entering the ministry?” I might as well tell you that, unless you want to change your career, never take a class with such a title! He tells us that most of the participants “thought their way right out of religious work.”

Religion’s loss was, of course, psychology’s gain: Rogers switched to the clinical psychology program of Columbia University, and received his Ph.D. in 1931. He had already begun his clinical work at the Rochester Society for the Prevention of Cruelty to Children. At this clinic, he learned about Otto Rank’s theory and therapy techniques, which started him on the road to developing his own approach.

He was offered a full professorship at Ohio State in 1940. In 1942, he wrote his first book, Counseling and Psychotherapy. Then, in 1945, he was invited to set up a counseling center at the University of Chicago. It was while working there that in 1951 he published his major work, Client-Centered Therapy, wherein he outlines his basic theory.
In 1957, he returned to teach at his alma mater, the University of Wisconsin. Unfortunately, it was a time of conflict within their psychology department, and Rogers became very disillusioned with higher education. In 1964, he was happy to accept a research position in La Jolla, California. He provided therapy, gave speeches, and wrote, until his death in 1987.

Theory

Roger’s theory is a clinical one, based on years of experience dealing with his clients. He has this in common with Freud, for example. Also in common with Freud is that his is a particularly rich and mature theory -- well thought-out and logically tight, with broad application.

Not in common with Freud, however, is the fact that Rogers sees people as basically good or healthy -- or at very least, not bad or ill. In other words, he sees mental health as the normal progression of life, and he sees mental illness, criminality, and other human problems, as distortions of that natural tendency. Also not in common with Freud is the fact that Rogers’ theory is a relatively simple one.

Also not in common with Freud is that Rogers’ theory is particularly simple -- elegant even! The entire theory is built on a single “force of life” he calls the actualizing tendency. It can be defined as the built-in motivation present in every life-form to develop its potentials to the fullest extent possible. We’re not just talking about survival! Rogers believes that all creatures strive to make the very best of their existence. If they fail to do so, it is not for a lack of desire.

Rogers captures with this single great need or motive all the other motives that other theorists talk about. He asks us, why do we want air and water and food? Why do we seek safety, love, and a sense of competence? Why, indeed, do we seek to discover new medicines, invent new power sources, or create new works of art? Because, he answers, it is in our nature as living things to do the very best we can!

Keep in mind that, unlike Maslow’s use of the term, Rogers applies it to all living creatures. Some of his earliest examples, in fact, include seaweed and mushrooms! Think about it: Doesn’t it sometimes amaze you the way weeds will grow through the sidewalk, or saplings crack boulders, or animals survive desert conditions or the frozen north?

He also applied the idea to ecosystems, saying that an ecosystem such as a forest, with all its complexity, has a much greater actualization potential than a simple ecosystem such as a corn field. If one bug were to become extinct in a forest, there are likely to be other creatures that will adapt to fill the gap; On the other hand, one bout of “corn blight” or some such disaster, and you have a dust bowl. The same for us as individuals: If we live as we should, we will become increasingly complex, like the forest, and thereby remain flexible in the face of life’s little -- and big -- disasters.
People, however, in the course of actualizing their potentials, created society and culture. In and of itself, that’s not a problem: We are a social creature, it is our nature. But when we created culture, it developed a life of its own. Rather than remaining close to other aspects of our natures, culture can become a force in its own right. And even if, in the long run, a culture that interferes with our actualization dies out, we, in all likelihood, will die with it.

Don’t misunderstand: Culture and society are not intrinsically evil! It’s more along the lines of the birds of paradise found in Papua-New Guinea. The colorful and dramatic plumage of the males apparently distract predators from females and the young. Natural selection has led these birds towards more and more elaborate tail feathers, until in some species the male can no longer get off the ground. At that point, being colorful doesn’t do the male -- or the species -- much good! In the same way, our elaborate societies, complex cultures, incredible technologies, for all that they have helped us to survive and prosper, may at the same time serve to harm us, and possibly even destroy us.

Details

Rogers tells us that organisms know what is good for them. Evolution has provided us with the senses, the tastes, the discriminations we need: When we hunger, we find food -- not just any food, but food that tastes good. Food that tastes bad is likely to be spoiled, rotten, unhealthy. That what good and bad tastes are -- our evolutionary lessons made clear! This is called **organismic valuing**.

Among the many things that we instinctively value is **positive regard**, Rogers umbrella term for things like love, affection, attention, nurturance, and so on. It is clear that babies need love and attention. In fact, it may well be that they die without it. They certainly fail to thrive -- i.e. become all they can be.

Another thing -- perhaps peculiarly human -- that we value is **positive self-regard**, that is, self-esteem, self-worth, a positive self-image. We achieve this positive self-regard by experiencing the positive regard others show us over our years of growing up. Without this self-regard, we feel small and helpless, and again we fail to become all that we can be!

Like Maslow, Rogers believes that, if left to their own devices, animals will tend to eat and drink things that are good for them, and consume them in balanced proportions. Babies, too, seem to want and like what they need. Somewhere along the line, however, we have created an environment for ourselves that is significantly different from the one in which we evolved. In this new environment are such things as refined sugar, flour, butter, chocolate, and so on, that our ancestors in Africa never knew. These things have flavors that appeal to our organismic valuing -- yet do not serve our actualization well. Over millions of years, we may evolve to find broccoli more satisfying than cheesecake -- but by then, it'll be way too late for you and me.

Our society also leads us astray with **conditions of worth**. As we grow up, our parents, teachers, peers, the media, and others, only give us what we need when we show we are “worthy,” rather than just because we need it. We get a drink when we finish our class, we
get something sweet when we finish our vegetables, and most importantly, we get love and affection if and only if we “behave!”

Getting positive regard on “on condition” Rogers calls **conditional positive regard**. Because we do indeed need positive regard, these conditions are very powerful, and we bend ourselves into a shape determined, not by our organismic valuing or our actualizing tendency, but by a society that may or may not truly have our best interests at heart. A “good little boy or girl” may not be a healthy or happy boy or girl!

Over time, this “conditioning” leads us to have **conditional positive self-regard** as well. We begin to like ourselves only if we meet up with the standards others have applied to us, rather than if we are truly actualizing our potentials. And since these standards were created without keeping each individual in mind, more often than not we find ourselves unable to meet them, and therefore unable to maintain any sense of self-esteem.

![Diagram](https://www.numerons.in)

Incongruity

The aspect of your being that is founded in the actualizing tendency, follows organismic valuing, needs and receives positive regard and self-regard, Rogers calls the **real self**. It is the “you” that, if all goes well, you will become.

On the other hand, to the extent that our society is out of synch with the actualizing tendency, and we are forced to live with conditions of worth that are out of step with organismic valuing, and receive only conditional positive regard and self-regard, we develop instead an **ideal self**. By ideal, Rogers is suggesting something not real, something that is always out of our reach, the standard we can’t meet.
This gap between the real self and the ideal self, the "I am" and the "I should" is called **incongruity**. The greater the gap, the more incongruity. The more incongruity, the more suffering. In fact, incongruity is essentially what Rogers means by **neurosis**: Being out of sync with your own self. If this all sounds familiar to you, it is precisely the same point made by Karen Horney!

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**Defenses**

When you are in a situation where there is an incongruity between your image of yourself and your immediate experience of yourself (i.e. between the ideal and the real self), you are in a **threatening situation**. For example, if you have been taught to feel unworthy if you do not get A's on all your tests, and yet you aren't really all that great a student, then situations such as tests are going to bring that incongruity to light -- tests will be very threatening.

When you are expecting a threatening situation, you will feel **anxiety**. Anxiety is a signal indicating that there is trouble ahead, that you should avoid the situation! One way to avoid the situation, of course, is to pick yourself up and run for the hills. Since that is not usually an option in life, instead of running physically, we run psychologically, by using **defenses**.

Rogers' idea of defenses is very similar to Freud's, except that Rogers considers everything from a perceptual point-of-view, so that even memories and impulses are thought of as perceptions. Fortunately for us, he has only two defenses: denial and perceptual distortion.

**Denial** means very much what it does in Freud's system: You block out the threatening situation altogether. An example might be the person who never picks up his test or asks about test results, so he doesn't have to face poor grades (at least for now!). Denial for
Rogers does also include what Freud called repression: If keeping a memory or an impulse out of your awareness -- refuse to perceive it -- you may be able to avoid (again, for now!) a threatening situation.

**Perceptual distortion** is a matter of reinterpreting the situation so that it appears less threatening. It is very similar to Freud’s rationalization. A student that is threatened by tests and grades may, for example, blame the professor for poor teaching, trick questions, bad attitude, or whatever. The fact that sometimes professors are poor teachers, write trick questions, and have bad attitudes only makes the distortion work better: If it could be true, then maybe it really was true! It can also be much more obviously perceptual, such as when the person misreads his grade as better than it is.

Unfortunately for the poor neurotic (and, in fact, most of us), every time he or she uses a defense, they put a greater distance between the real and the ideal. They become ever more incongruous, and find themselves in more and more threatening situations, develop greater and greater levels of anxiety, and use more and more defenses.... It becomes a vicious cycle that the person eventually is unable to get out of, at least on their own.

Rogers also has a partial explanation for **psychosis**: Psychosis occurs when a person's defense are overwhelmed, and their sense of self becomes "shattered" into little disconnected pieces. His behavior likewise has little consistency to it. We see him as having "psychotic breaks" -- episodes of bizarre behavior. His words may make little sense. His emotions may be inappropriate. He may lose the ability to differentiate self and non-self, and become disoriented and passive.

**The fully-functioning person**

Rogers, like Maslow, is just as interested in describing the healthy person. His term is "fully-functioning," and involves the following qualities:

1. **Openness to experience.** This is the opposite of defensiveness. It is the accurate perception of one's experiences in the world, including one's feelings. It also means being able to accept reality, again including one's feelings. Feelings are such an important part of openness because they convey organismic valuing. If you cannot be open to your feelings, you cannot be open to acualization. The hard part, of course, is distinguishing real feelings from the anxieties brought on by conditions of worth.

2. **Existential living.** This is living in the here-and-now. Rogers, as a part of getting in touch with reality, insists that we not live in the past or the future -- the one is gone, and the other isn't anything at all, yet! The present is the only reality we have. Mind you, that doesn't mean we shouldn't remember and learn from our past. Neither does it mean we shouldn't plan or even day-dream about the future. Just recognize these things for what they are: memories and dreams, which we are experiencing here in the present.

3. **Organismic trusting.** We should allow ourselves to be guided by the organismic valuing process. We should trust ourselves, do what feels right, what comes natural. This,
as I’m sure you realize, has become a major sticking point in Rogers’ theory. People say, sure, do what comes natural -- if you are a sadist, hurt people; if you are a masochist, hurt yourself; if the drugs or alcohol make you happy, go for it; if you are depressed, kill yourself... This certainly doesn’t sound like great advice. In fact, many of the excesses of the sixties and seventies were blamed on this attitude. But keep in mind that Rogers meant trust your real self, and you can only know what your real self has to say if you are open to experience and living existentially! In other words, organismic trusting assumes you are in contact with the actualizing tendency.

4. Experiential freedom. Rogers felt that it was irrelevant whether or not people really had free will. We feel very much as if we do. This is not to say, of course, that we are free to do anything at all: We are surrounded by a deterministic universe, so that, flap my arms as much as I like, I will not fly like Superman. It means that we feel free when choices are available to us. Rogers says that the fully-functioning person acknowledges that feeling of freedom, and takes responsibility for his choices.

5. Creativity. If you feel free and responsible, you will act accordingly, and participate in the world. A fully-functioning person, in touch with actualization, will feel obliged by their nature to contribute to the actualization of others, even life itself. This can be through creativity in the arts or sciences, through social concern and parental love, or simply by doing one’s best at one’s job. Creativity as Rogers uses it is very close to Erikson's generativity.

Therapy

Carl Rogers is best known for his contributions to therapy. His therapy has gone through a couple of name changes along the way: He originally called it non-directive, because he felt that the therapist should not lead the client, but rather be there for the client while the client directs the progress of the therapy. As he became more experienced, he realized that, as "non-directive" as he was, he still influenced his client by his very "non-directiveness!" In other words, clients look to therapists for guidance, and will find it even when the therapist is trying not to guide.

So he changed the name to client-centered. He still felt that the client was the one who should say what is wrong, find ways of improving, and determine the conclusion of therapy -- his therapy was still very "client-centered" even while he acknowledged the impact of the therapist. Unfortunately, other therapists felt that this name for his therapy was a bit of a slap in the face for them: Aren’t most therapies "client-centered?"

Nowadays, though the terms non-directive and client-centered are still used, most people just call it Rogerian therapy. One of the phrases that Rogers used to describe his therapy is "supportive, not reconstructive," and he uses the analogy of learning to ride a bicycle to explain: When you help a child to learn to ride a bike, you can’t just tell them how. They have to try it for themselves. And you can’t hold them up the whole time either. There comes a point when you have to let them go. If they fall, they fall, but if you hang on, they never learn.
It's the same in therapy. If independence (autonomy, freedom with responsibility) is what you are helping a client to achieve, then they will not achieve it if they remain dependent on you, the therapist. They need to try their insights on their own, in real life beyond the therapist's office! An authoritarian approach to therapy may seem to work marvelously at first, but ultimately it only creates a dependent person.

There is only one technique that Rogerians are known for: reflection. Reflection is the mirroring of emotional communication: If the client says "I feel like shit!" the therapist may reflect this back to the client by saying something like "So, life's getting you down, hey?" By doing this, the therapist is communicating to the client that he is indeed listening and cares enough to understand.

The therapist is also letting the client know what it is the client is communicating. Often, people in distress say things that they don't mean because it feels good to say them. For example, a woman once came to me and said "I hate men!" I reflected by saying "You hate all men?" Well, she said, maybe not all -- she didn't hate her father or her brother or, for that matter, me. Even with those men she "hated," she discovered that the great majority of them she didn't feel as strongly as the word hate implies. In fact, ultimately, she realized that she didn't trust many men, and that she was afraid of being hurt by them the way she had been by one particular man.

Reflection must be used carefully, however. Many beginning therapists use it without thinking (or feeling), and just repeat every other phrase that comes out of the client's mouth. They sound like parrots with psychology degrees! Then they think that the client doesn't notice, when in fact it has become a stereotype of Rogerian therapy the same way as sex and mom have become stereotypes of Freudian therapy. Reflection must come from the heart -- it must be genuine, congruent.

Which brings us to Rogers' famous requirements of the therapist. Rogers felt that a therapist, in order to be effective, must have three very special qualities:

1. **Congruence** -- genuineness, honesty with the client.
2. **Empathy** -- the ability to feel what the client feels.
3. **Respect** -- acceptance, unconditional positive regard towards the client.

He says these qualities are "necessary and sufficient": If the therapist shows these three qualities, the client will improve, even if no other special "techniques" are used. If the therapist does not show these three qualities, the client's improvement will be minimal, no matter how many "techniques" are used. Now this is a lot to ask of a therapist! They're just human, and often enough a bit more "human" (let's say unusual) than most. Rogers does give in a little, and he adds that the therapist must show these things in the therapy relationship. In other words, when the therapist leaves the office, he can be as "human" as anybody.
I happen to agree with Rogers, even though these qualities are quite demanding. Some of the research does suggest that techniques don't matter nearly as much as the therapist's personality, and that, to some extent at least, therapists are "born" not "made."

**Abraham Maslow**

Abraham Harold Maslow (April 1, 1908 – June 8, 1970) was an American professor of psychology at Brandeis University, Brooklyn College, New School for Social Research and Columbia University who founded humanistic psychology and created Maslow's hierarchy of needs. He stressed the importance of focusing on the positive qualities in people, as opposed to treating them as a 'bag of symptoms.'

**Biography**

Born and raised in Brooklyn, New York, Maslow was the oldest of seven children. His parents were first generation Jewish immigrants from Russia who were not intellectually oriented but valued education. Maslow described himself as shy, timid, and awkward during his childhood. It was a tough time for Maslow, as he experienced Anti-semitism from his teachers and from other children around the neighborhood. He had various encounters with anti-semitic gangs who would chase and throw rocks at him. The tension outside of his home was also felt within it, he never got along with his mother, and actually developed a strong revulsion towards her. He is quoted as saying "What I had reacted to and totally hated and rejected was not only her physical appearance, but also her values and world view, her stinginess, her total selfishness, her lack of love for anyone else in the world -- even her own husband and children -- her narcissism, her Negro prejudice, her exploitation of everyone, her assumption that anyone was wrong who disagreed with her, her lack of friends, her sloppiness and dirtiness..." He also grew up with few friends other than his
cousin Will, and as a result "...[He] grew up in libraries and among books." It was here that he developed his love for reading and learning. He went to Boys High School, one of the top high schools in Brooklyn. Here, he served as the officer to many academic clubs, and became editor of the Latin Magazine. He also edited Principia, the school's Physics paper, for a year.

After graduating from High School Maslow went to the City College of New York. In 1926 he began taking legal studies classes at night in addition to his undergraduate course load. He hated it and almost immediately dropped out. In 1927 he transferred to Cornell, but due to poor grades and the high cost of the education, he left after just one semester. He re-enrolled at city college and upon graduation went to graduate school at the University of Wisconsin to study psychology. In 1928, he married his first cousin Bertha, whom he had met in Brooklyn years earlier and who was still in High School at the time. Maslow's psychology training at UW was decidedly experimental-behaviorist. At Wisconsin he pursued a line of research which included, investigating primate dominance behaviour and sexuality. Maslow, upon the recommendation of Professor Hulsey Cason wrote his master's thesis on 'learning, retention, and reproduction of verbal material.' Maslow regarded the research as embarrassingly trivial, but he completed his thesis the summer of 1931 and was awarded his master's degree in Psychology. Afterward, he was so ashamed of the thesis that he removed it from the psychology library and tore out its catalog listing. Ironically, Professor Carson admired the research enough to urge Maslow to submit it for publication. Much to Maslow's surprise, his thesis was published as two articles in 1934.

He went on to further research at Columbia University, continuing similar studies; there he found another mentor in Alfred Adler, one of Sigmund Freud's early colleagues.

From 1937 to 1951, Maslow was on the faculty of Brooklyn College. In New York he found two more mentors, anthropologist Ruth Benedict and Gestalt psychologist Max Wertheimer, whom he admired both professionally and personally. These two were so accomplished in both realms, and such "wonderful human beings" as well, that Maslow began taking notes about them and their behaviour. This would be the basis of his lifelong research and thinking about mental health and human potential. He wrote extensively on the subject, borrowing ideas from other psychologists but adding significantly to them, especially the concepts of a hierarchy of needs, metaneeds, metamotivation, self-actualizing persons, and peak experiences. Maslow became the leader of the humanistic school of psychology that emerged in the 1950s and 1960s, which he referred to as the "third force" - beyond Freudian theory and behaviourism. In 1967, the American Humanist Association named him Humanist of the Year.

Death

Maslow was a professor at Brandeis University from 1951 to 1969, and then became a resident fellow of the Laughlin Institute in California. He died of a heart attack on June 8, 1970.
Humanistic theories of self-actualization

Many psychologists have made impacts on society's understanding of the world. Abraham Maslow was one of these; he brought a new face to the study of human behavior. He called his new discipline, "Humanistic Psychology."

His family life and his experiences influenced his psychological ideas. After World War II, Maslow began to question the way psychologists had come to their conclusions, and though he didn’t completely disagree, he had his own ideas on how to understand the human mind.

Humanistic psychologists believe that every person has a strong desire to realize his or her full potential, to reach a level of "self-actualization". To prove that humans are not simply blindly reacting to situations, but trying to accomplish something greater, Maslow studied mentally healthy individuals instead of people with serious psychological issues. This informed his theory that people experience “peak experiences”, high points in life when the individual is in harmony with himself and his surroundings. In Maslow's view, self-actualized people can have many peak experiences throughout a day while others have those experiences less frequently.

Hierarchy of needs

![Diagram of Maslow's Hierarchy of Needs]

An interpretation of Maslow's hierarchy of needs, represented as a pyramid with the more basic needs at the bottom.

A visual aid Maslow created to explain his theory, which he called the Hierarchy of Needs, is a pyramid depicting the levels of human needs, psychological and physical. When a human being ascends the steps of the pyramid he reaches self actualization. At the bottom of the
pyramid are the "Basic needs or Physiological needs" of a human being, food and water and sex. The next level is "Safety Needs: Security, Order, and Stability." These two steps are important to the physical survival of the person. Once individuals have basic nutrition, shelter and safety, they attempt to accomplish more. The third level of need is "Love and Belonging," which are psychological needs; when individuals have taken care of themselves physically, they are ready to share themselves with others. The fourth level is achieved when individuals feel comfortable with what they have accomplished. This is the "Esteem" level, the level of success and status (from self and others). The top of the pyramid, "Need for Self-actualization," occurs when individuals reach a state of harmony and understanding. (The Developing Person through the Life Span, (1983) pg. 44)

Maslow based his study on the writings of other psychologists, Albert Einstein and people he knew who clearly met the standard of self actualization. Maslow used Einstein's writings and accomplishments to exemplify the characteristics of the self actualized person. He realized that all the individuals he studied had similar personality traits. All were "reality centered", able to differentiate what was fraudulent from what was genuine. They were also "problem centered", meaning that they treated life's difficulties as problems that demanded solutions. These individuals also were comfortable being alone and had healthy personal relationships. They had only a few close friends and family rather than a large number of shallow relationships. One historical figure Maslow found to be helpful in his journey to understanding self actualization was Lao Tzu, The Father of Taoism. A tenet of Taoism is that people do not obtain personal meaning or pleasure by seeking material possessions.

When Maslow introduced these ideas some weren't ready to understand them; others dismissed them as unscientific. Sometimes viewed as disagreeing with Freud and psychoanalytic theory, Maslow actually positioned his work as a vital complement to that of Freud. Maslow stated in his book, "It is as if Freud supplied us the sick half of psychology and we must now fill it out with the healthy half." (Toward a psychology of being, 1968)

There are two faces of human nature—the sick and the healthy—so there should be two faces of psychology.

Consequently, Maslow argued, the way in which essential needs are fulfilled is just as important as the needs themselves. Together, these define the human experience. To the extent a person finds cooperative social fulfillment, he establishes meaningful relationships with other people and the larger world. In other words, he establishes meaningful connections to an external reality—an essential component of self-actualization. In contrast, to the extent that vital needs find selfish and competitive fulfillment, a person acquires hostile emotions and limited external relationships—his awareness remains internal and limited.

Ruth Benedict and Max Wertheimer were Maslow's models of self-actualization. From them he generalized that, among other characteristics, self-actualizing people tend to focus on problems outside themselves; have a clear sense of what is true and what is false; are spontaneous and creative; and are not bound too strictly by social conventions.
Beyond the routine of needs fulfillment, Maslow envisioned moments of extraordinary experience, known as Peak experiences, which are profound moments of love, understanding, happiness, or rapture, during which a person feels more whole, alive, self-sufficient and yet a part of the world, more aware of truth, justice, harmony, goodness, and so on. Self-actualizing people have many such peak experiences.

Maslow used the term Metamotivation to describe self actualized people who are driven by innate forces beyond their basic needs, so that they may explore and reach their full human potential.

**B-values**

In studying accounts of peak experiences, Maslow identified a manner of thought he called "Being-cognition" (or "B-cognition", which is holistic and accepting, as opposed to the evaluative "Deficiency-cognition" or "D-cognition") and values he called "Being-values". He listed the B-values as:

- **WHOLENESS** (unity; integration; tendency to one-ness; interconnectedness; simplicity; organization; structure; dichotomy-transcendence; order);
- **PERFECTION** (necessity; just-right-ness; just-so-ness; inevitability; suitability; justice; completeness; "oughtness");
- **COMPLETION** (ending; finality; justice; "it’s finished"; fulfillment; finis and telos; destiny; fate);
- **JUSTICE** (fairness; orderliness; lawfulness; "oughtness");
- **ALIVENESS** (process; non-deadness; spontaneity; self-regulation; full-functioning);
- **RICHNESS** (differentiation, complexity; intricacy);
- **SIMPLICITY** (honesty; nakedness; essentiality; abstract, essential, skeletal structure);
- **BEAUTY** (rightness; form; aliveness; simplicity; richness; wholeness; perfection; completion; uniqueness; honesty);
- **GOODNESS** (rightness; desirability; oughtness; justice; benevolence; honesty);
- **UNIQUENESS** (idiosyncrasy; individuality; non-comparability; novelty);
- **EFFORTLESSNESS** (ease; lack of strain, striding or difficulty; grace; perfect, beautiful functioning);
- **PLAYFULNESS** (fun; joy; amusement; gaiety; humor; exuberance; effortlessness);
- **TRUTH** (honesty; reality; nakedness; simplicity; richness; oughtness; beauty; pure, clean and unadulterated; completeness; essentiality).
- **SELF-SUFFICIENCY** (autonomy; independence; not-needing-other-than-itself-in-order-to-be-itself; self-determining; environment-transcendence; separateness; living by its own laws).

**Legacy**

Maslow’s thinking was original — most psychologists before him had been concerned with the abnormal and the ill. He wanted to know what constituted positive mental health. Humanistic psychology gave rise to several different therapies, all guided by the idea that
people possess the inner resources for growth and healing and that the point of therapy is to help remove obstacles to individuals' achieving them. The most famous of these was client-centered therapy developed by Carl Rogers.

Maslow’s influence extended beyond psychology - his work on peak experiences is relevant to religious studies, while his work on management is applicable to transpersonal business studies.

In 2006, conservative social critic Christina Hoff Sommers and practicing psychiatrist Sally Satel asserted that due to lack of empirical support for his theories, Maslow's ideas have fallen out of fashion and are "no longer taken seriously in the world of academic psychology." However, Maslow's work has enjoyed a revival of interest and influence among leaders of the positive psychology movement such as Martin Seligman.

**Maslow's hierarchy of needs**

An interpretation of Maslow's hierarchy of needs, represented as a pyramid with the more basic needs at the bottom.

Maslow's hierarchy of needs is a theory in psychology, proposed by Abraham Maslow in his 1943 paper A Theory of Human Motivation. Maslow subsequently extended the idea to include his observations of humans' innate curiosity. His theories parallel many other theories of human developmental psychology, all of which focus on describing the stages of growth in humans.

Maslow studied what he called exemplary people such as Albert Einstein, Jane Addams, Eleanor Roosevelt, and Frederick Douglass rather than mentally ill or neurotic people,
writing that "the study of crippled, stunted, immature, and unhealthy specimens can yield only a cripple psychology and a cripple philosophy." Maslow studied the healthiest 1% of the college student population.

Maslow’s theory was fully expressed in his 1954 book Motivation and Personality.

Hierarchy

Maslow’s hierarchy of needs is often portrayed in the shape of a pyramid, with the largest and most fundamental levels of needs at the bottom, and the need for self-actualization at the top.

The most fundamental and basic four layers of the pyramid contain what Maslow called "deficiency needs" or "d-needs": esteem, friendship and love, security, and physical needs. With the exception of the most fundamental (physiological) needs, if these "deficiency needs" are not met, the body gives no physical indication but the individual feels anxious and tense. Maslow’s theory suggests that the most basic level of needs must be met before the individual will strongly desire (or focus motivation upon) the secondary or higher level needs. Maslow also coined the term Metamotivation to describe the motivation of people who go beyond the scope of the basic needs and strive for constant betterment. Metamotivated people are driven by B-needs (Being Needs), instead of deficiency needs (D-Needs).

Physiological needs

For the most part, physiological needs are obvious — they are the literal requirements for human survival. If these requirements are not met, the human body simply cannot continue to function.

Air, water, and food are metabolic requirements for survival in all animals, including humans. Clothing and shelter provide necessary protection from the elements. The intensity of the human sexual instinct is shaped more by sexual competition than maintaining a birth rate adequate to survival of the species.

Safety needs

With their physical needs relatively satisfied, the individual’s safety needs take precedence and dominate behavior. In the absence of physical safety -- due to terrorist attack, war, natural disaster, or, in cases of family violence, childhood abuse, etc -- people (re-)experience post-traumatic stress disorder and trans-generational trauma transfer. In the absence of economic safety -- due to economic crisis and lack of work opportunities - these safety needs manifest themselves in such things as a preference for job security, grievance procedures for protecting the individual from unilateral authority, savings accounts, insurance policies, reasonable disability accommodations, and the like.

Safety and Security needs include:
- Personal security
- Financial security
- Health and well-being
- Safety net against accidents/illness and their adverse impacts

**Love and belonging**

After physiological and safety needs are fulfilled, the third layer of human needs are social and involve feelings of belongingness. The need is especially strong in childhood and can over-ride the need for safety as witnessed in children who cling to abusive parents which is sometimes called Stockholm syndrome. The absence of this aspect of Maslow's hierarchy - due to hospitalism, neglect, shunning, ostracism etc - can impact individual's ability to form and maintain emotionally significant relationships in general, such as:

- Friendship
- Intimacy
- Family

Humans need to feel a sense of belonging and acceptance, whether it comes from a large social group, such as clubs, office culture, religious groups, professional organizations, sports teams, gangs, or small social connections (family members, intimate partners, mentors, close colleagues, confidants). They need to love and be loved (sexually and non-sexually) by others. In the absence of these elements, many people become susceptible to loneliness, social anxiety, and clinical depression. This need for belonging can often overcome the physiological and security needs, depending on the strength of the peer pressure; an anorexic, for example, may ignore the need to eat and the security of health for a feeling of control and belonging.

**Esteem**

All humans have a need to be respected and to have self-esteem and self-respect. Esteem presents the normal human desire to be accepted and valued by others. People need to engage themselves to gain recognition and have an activity or activities that give the person a sense of contribution, to feel self-valued, be it in a profession or hobby. Imbalances at this level can result in low self-esteem or an inferiority complex. People with low self-esteem need respect from others. They may seek fame or glory, which again depends on others. Note, however, that many people with low self-esteem will not be able to improve their view of themselves simply by receiving fame, respect, and glory externally, but must first accept themselves internally. Psychological imbalances such as depression can also prevent one from obtaining self-esteem on both levels.

Most people have a need for a stable self-respect and self-esteem. Maslow noted two versions of esteem needs, a lower one and a higher one. The lower one is the need for the respect of others, the need for status, recognition, fame, prestige, and attention. The higher one is the need for self-respect, the need for strength, competence, mastery, self-
confidence, independence and freedom. The latter one ranks higher because it rests more on inner competence won through experience. Deprivation of these needs can lead to an inferiority complex, weakness and helplessness.

Maslow also states that even though these are examples of how the quest for knowledge is separate from basic needs he warns that these “two hierarchies are interrelated rather than sharply separated” (Maslow 97). This means that this level of need, as well as the next and highest level, are not strict, separate levels but closely related to others, and this is possibly the reason that these two levels of need are left out of most textbooks.

Self-actualization

“What a man can be, he must be.” This forms the basis of the perceived need for self-actualization. This level of need pertains to what a person’s full potential is and realizing that potential. Maslow describes this desire as the desire to become more and more what one is, to become everything that one is capable of becoming. This is a broad definition of the need for self-actualization, but when applied to individuals the need is specific. For example one individual may have the strong desire to become an ideal parent, in another it may be expressed athletically, and in another it may be expressed in painting, pictures, or inventions. As mentioned before, in order to reach a clear understanding of this level of need one must first not only achieve the previous needs, physiological, safety, love, and esteem, but master these needs.

Self-transcendence

Viktor Frankl later added Self-transcendence

Criticisms

In their extensive review of research based on Maslow’s theory, Wahba and Bridgewell found little evidence for the ranking of needs Maslow described, or even for the existence of a definite hierarchy at all. Chilean economist and philosopher Manfred Max-Neef has also argued fundamental human needs are non-hierarchical, and are ontologically universal and invariant in nature—part of the condition of being human; poverty, he argues, may result from any one of these needs being frustrated, denied or unfulfilled.

The order in which the hierarchy is arranged (with self-actualization as the highest order need) has been criticised as being ethnocentric by Geert Hofstede. Hofstede's criticism of Maslow’s pyramid as ethnocentric may stem from the fact that Maslow's hierarchy of needs neglects to illustrate and expand upon the difference between the social and intellectual needs of those raised in individualistic societies and those raised in collectivist societies. Maslow created his hierarchy of needs from an individualistic perspective, being that he was from the United States, a highly individualistic nation. The needs and drives of those in individualistic societies tend to be more self centered than those in collectivist societies, focusing on improvement of the self, with self actualization being the apex of self improvement. Since the hierarchy was written from the perspective of an individualist, the
order of needs in the hierarchy with self actualization at the top is not representative of the needs of those in collectivist cultures. In collectivist societies, the needs of acceptance and community will outweigh the needs for freedom and individuality.

Maslow’s hierarchy has also been criticized as being individualistic because of the position and value of sex on the pyramid. Maslow’s pyramid puts sex on the bottom rung of physiological needs, along with breathing and food. It views sex from an individualistic and not collectivist perspective; i.e., as an individualistic physiological need that must be satisfied before one moves on to higher pursuits. This view of sex neglects the emotional, familial and evolutionary implications of sex within the community.

Business

Marketing

Courses in marketing teach Maslow’s hierarchy as one of the first theories as a basis for understanding consumers’ motives for action. Marketers have historically looked towards consumers’ needs to define their actions in the market. If producers design products meeting consumer needs, consumers will more often choose those products over those of competitors. Whichever product better fills the void created by the need will be chosen more frequently, thus increasing sales. This makes the model relevant to transpersonal business studies.

International Business

Understanding the strengths and weaknesses of Maslow’s hierarchy of needs is important in the field of international business. Evaluating the different needs, values, drives and priorities of people from different countries - individualistic or collectivist - is incredibly valuable in cross-cultural communications, and especially within the workplace. It also illustrates how differences in values can greatly affect work atmosphere and work ethic between cultures: “For example, societal cultures in many individualistic countries, such as the United States, may lead to an advantage in technological research and development. Many collectivistic societal cultures, such as that in Japan, may result in an advantage in workforce organization, quality control of products and service, and establishment of good relationships among contractees, suppliers and customers”.

Self-actualization

Self-actualization is a term that has been used in various psychology theories, often in slightly different ways. The term was originally introduced by the organismic theorist Kurt Goldstein for the motive to realize one’s full potential. In his view, it is the organism’s master motive, the only real motive: "the tendency to actualize itself as fully as possible is the basic drive...the drive of self-actualization." Carl Rogers similarly wrote of "the curative force in psychotherapy - man’s tendency to actualize himself, to become his potentialities...to express and activate all the capacities of the organism." However, the
concept was brought most fully to prominence in Abraham Maslow’s hierarchy of needs theory as the final level of psychological development that can be achieved when all basic and mental needs are fulfilled and the "actualization" of the full personal potential takes place.

In Goldstein’s theory

According to Kurt Goldstein’s book, The Organism: A Holistic Approach to Biology Derived from Pathological Data in Man, self-actualization is "the tendency to actualize, as much as possible, [the organism’s] individual capacities" in the world. The tendency toward self-actualization is "the only drive by which the life of an organism is determined." Goldstein defined self-actualization as a driving life force that will ultimately lead to maximizing one's abilities and determine the path of one’s life; compare will to power.

“What a man can be, he must be.” This forms the basis of the perceived need for self-actualization. This level of need pertains to what a person’s full potential is and realizing that potential. Maslow describes this desire as the desire to become more and more what one is, to become everything that one is capable of becoming. This is a broad definition of the need for self-actualization, but when applied to individuals the need is specific. For example one individual may have the strong desire to become an ideal parent, in another it may be expressed athletically, and in another it may be expressed in painting, pictures, or inventions. As mentioned before, in order to reach a clear understanding of this level of need one must first not only achieve the previous needs, physiological, safety, love, and esteem, but master these needs.

Maslow’s hierarchy of needs

The term was later used by Abraham Maslow in his article, A Theory of Human Motivation, Maslow explicitly defines self-actualization to be "the desire for self-fulfillment, namely the tendency for him [the individual] to become actualized in what he is potentially. This tendency might be phrased as the desire to become more and more what one is, to become everything that one is capable of becoming." Maslow used the term self-actualization to describe a desire, not a driving force, that could lead to realizing one's capabilities. Maslow did not feel that self-actualization determined one's life; rather, he felt that it gave the individual a desire, or motivation to achieve budding ambitions. Maslow's usage of the term is now popular in modern psychology when discussing personality from the humanistic approach.

A basic definition from a typical college text book defines self-actualization according to Maslow simply as "the full realization of one's potential" without any mention of Goldstein.

A more explicit definition of self-actualization according to Maslow is "intrinsic growth of what is already in the organism, or more accurately of what is the organism itself...self-actualization is growth-motivated rather than deficiency-motivated." This explanation emphasizes the fact that self-actualization cannot normally be reached until other lower order necessities of Maslow’s hierarchy of needs are satisfied. While Goldstein defined self-
actualization as a driving force, Maslow uses the term to describe personal growth that takes place once lower order needs have been met, one corollary being that, in his opinion, "self-actualisation...rarely happens...certainly in less than 1% of the adult population." The fact that "most of us function most of the time on a level lower than that of self-actualization" he called the psychopathology of normality.

Maslow considered self-actualizing people to possess "an unusual ability to detect the spurious, the fake, and the dishonest in personality, and in general to judge the people correctly and efficiently."

Common traits amongst people who have reached self-actualization are:

- They embrace reality and facts rather than denying truth.
- They are spontaneous.
- They are "focused on problems outside themselves."
- They "can accept their own human nature in the stoic style, with all its shortcomings," are similarly acceptant of others, and generally lack prejudice.

For Goldstein, self-actualization was a motive and, for Maslow, a level of development; for both, however, roughly the same kinds of qualities were expressed: independence, autonomy, a tendency to form few but deep friendships, a "philosophical" sense of humor, a tendency to resist outside pressures and a general transcendence of the environment rather than "coping" with it.

Self-actualization has been discussed by Schott in connection with Transpersonal business studies.

In psychology

Self actualization is at the top of Maslow's hierarchy of needs - becoming "fully human"...maturity or self-actualization' - and is considered a part of the humanistic approach to personality. Humanistic psychology is one of several methods used in psychology for studying, understanding, and evaluating personality. The humanistic approach was developed because other approaches, such as the psychodynamic approach made famous by Sigmund Freud, focused on unhealthy individuals that exhibited disturbed behavior; whereas the humanistic approach focuses on healthy, motivated people and tries to determine how they define the self while maximizing their potential.

Stemming from this branch of psychology is Maslow’s hierarchy of needs. According to Maslow, people have lower order needs that in general must be fulfilled before high order needs can be satisfied: 'five sets of needs - physiological, safety, belongingness, esteem, and self-actualisation'.

As a person moves up Maslow's hierarchy of needs, eventually they may reach the summit — self actualization. Maslow’s hierarchy of needs begins with the most basic necessities deemed "the physiological needs" in which the individual will seek out items like food and
water, and must be able to perform basic functions such as breathing and sleeping. Once these needs have been met, a person can move on to fulfilling "the safety needs", where they will attempt to obtain a sense of security, physical comforts and shelter, employment, and property. The next level is "the belongingness and love needs", where people will strive for social acceptance, affiliations, a sense of belongingness and being welcome, sexual intimacy, and perhaps a family. Next are "the esteem needs", where the individual will desire a sense of competence, recognition of achievement by peers, and respect from others.

Some argue that once these needs are met, an individual is primed for self actualization. Others maintain that there are two more phases an individual must progress through before self actualization can take place. These include "the cognitive needs", where a person will desire knowledge and an understanding of the world around them, and "the aesthetic needs" which include a need for "symmetry, order, and beauty". Once all these needs have been satisfied, the final stage of Maslow's hierarchy—self actualization—can take place.

Classical Adlerian psychotherapy promotes this level of psychological development, utilizing the foundation of a 12-stage therapeutic model to realistically satisfy the basic needs, leading to an advanced stage of "meta-therapy," creative living, and self/other/task-actualization. Gestalt therapy, acknowledging that 'Kurt Goldstein first introduced the concept of the organism as a whole ', built on the assumption that "every individual, every plant, every animal has only one inborn goal - to actualize itself as it is."

Maslow's writings are used as inspirational resources. The key to Maslow's writings is understanding that there are no keys. Self Actualization is predicated on the individual having their lower deficiency needs met. Once a person has moved through feeling and believing that they are deficient, they naturally seek to grow into who they are, that is self-actualize.

**Criticism**

Maslow early noted his impression that "impulsivity, the unrestrained expression of any whim, the direct seeking for "kicks" and for non-social and purely private pleasures...is often mislabelled self-actualization." In this sense, "self-actualization" is little more than what Eric Berne described as the game of "Self-Expression"...based on the dogma "Feelings are Good".

Broader criticism from within humanistic psychology of the concept of self-actualization includes the danger that 'emphasis on the actualizing tendency...can lead to a highly positive view of the human being but one which is strangely non-relational'. There is also the risk of confusing "self-actualizing and self-image actualizing...the curse of the ideal." By conflating "the virtue of self-actualization and the reality of self-actualization," the latter becomes merely another measuring rod for the "topdog" - the nagging conscience: "You tell me to do things. You tell me to be - real. You tell me to be self-actualized...I don't have to be
that good!" More formally, this may be connected with the charge that "Rogers and Maslow both transform self-actualization from a descriptive notion into a moral norm."

In general during the early twenty-first-century, "the usefulness of the concepts of self and self-actualization continue to attract discussion and debate."

**Peak experience**

Peak experience is a term used to describe certain transpersonal and ecstatic states, particularly ones tinged with themes of euphoria, harmonization and interconnectedness. Participants characterize these experiences, and the revelations imparted therein, as possessing an ineffably mystical and spiritual (or overtly religious) quality or essence.

**Origins**

Many of the nuances the term now connotes were expounded by psychologist Abraham Maslow, in his 1964 work Religions, Values, and Peak Experiences. To some extent the term represents Maslow’s attempt to "naturalize" those experiences which have generally been identified as religious experiences and whose origin has, by implication, been thought of as supernatural. Maslow (1970) believed that the origin, core and essence of every known "high religion" was "the private, lonely, personal illumination, revelation, or ecstasy of some acutely sensitive prophet or seer" (p. 19).

**The nature of peak experiences**

Peak experiences are described by Maslow as especially joyous and exciting moments in life, involving sudden feelings of intense happiness and well-being, wonder and awe, and possibly also involving an awareness of transcendent unity or knowledge of higher truth (as though perceiving the world from an altered, and often vastly profound and awe-inspiring perspective). They usually come on suddenly and are often inspired by deep meditation, intense feelings of love, exposure to great art or music, or the overwhelming beauty of nature. Peak experiences can also be triggered pharmacologically. A 2006 double-blind clinical study by Griffiths and colleagues showed that psilocybin (the principal psychoactive component of various psychedelic mushroom species) induced intense peak experiences in a majority of study volunteers. In a 14-month follow-up study, a majority of volunteers reported that the psilocybin-induced experience had been overwhelmingly positive and was among the five most personally meaningful spiritual experiences of their lives.

Maslow describes how the peak experience tends to be uplifting and ego-transcending; it releases creative energies; it affirms the meaning and value of existence; it gives a sense of purpose to the individual; it gives a feeling of integration; it leaves a permanent mark on the individual, evidently changing them for the better. Peak experiences can be therapeutic in that they tend to increase the individual’s free will, self-determination, creativity, and empathy. The highest peaks include "feelings of limitless horizons opening up to the vision,
the feeling of being simultaneously more powerful and also more helpless than one ever was before, the feeling of great ecstasy and wonder and awe, and the loss of placing in time and space" (1970, p. 164). When peak experiences are especially powerful, the sense of self dissolves into an awareness of a greater unity. Maslow’s theories appear to be supported by the recent reports from Griffiths and colleagues, in which community observers (such as close family members) reported a variety of positive personality changes in volunteers in the psilocybin arm of the study.

Maslow claimed that all individuals are capable of peak experiences. Virtually everyone, he suggested, has a number of peak experiences in the course of their life, but often such experiences either go unrecognized, misunderstood or are simply taken for granted. In so-called "non-peakers", peak experiences are somehow resisted and suppressed. Maslow argued that peak experiences should be studied and cultivated, so that they can be introduced to those who have never had them or who resist them, providing them a route to achieve personal growth, integration, and fulfillment.

**Sustained Peak Experience**

Maslow defined lengthy, willfully induced peak experiences (plateau experiences) as a characteristic of the self-actualized. He described it as a state of witnessing or cognitive blissfulness, the achievement of which requires a lifetime of long and hard effort, and also self-actualization.

**Quotes**

Peak experiences are transient moments of self-actualization.

(Maslow, 1971, p. 48)

**On peak experiences:**

Human beings do not realize the extent to which their own sense of defeat prevents them from doing things they could do perfectly well. The peak experience induces the recognition that your own powers are far greater than you imagined them.

**Colin Wilson**

A somewhat more facetious and ironic viewpoint:

We can have in life but one great experience at best, and the secret of life is to reproduce that experience as often as possible.

**Oscar Wilde**

**Recent developments**
Prof. Gad Yair from the Hebrew University has developed a line of research on key experiences, especially relating to educational events. His papers on key experiences in higher education and on the role of those experiences in educational turning points are readily available over the net. The concept of key educational experiences refers to singular, short and intense educational encounters that proved to have strong and long-lasting effects on adults. These encounters are at times associated with a specific person who led them [e.g. teacher, parent, youth leader], at others with the structure of the episode itself [e.g. progress toward a peak event which is then associated with insight and hindsight]. Indeed, many respondents speak of their key educational experiences in terms of sight: Exceptional activities cause prior blinders to be suddenly lifted off, producing clear vision and insight, notably about students’ own selves.

**ABRAHAM MASLOW: Summarized**

**1908-1970**

Dr. C. George Boeree

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**Biography**

Abraham Harold Maslow was born April 1, 1908 in Brooklyn, New York. He was the first of seven children born to his parents, who themselves were uneducated Jewish immigrants from Russia. His parents, hoping for the best for their children in the new world, pushed him hard for academic success. Not surprisingly, he became very lonely as a boy, and found his refuge in books.

To satisfy his parents, he first studied law at the City College of New York (CCNY). After three semesters, he transferred to Cornell, and then back to CCNY. He married Bertha Goodman, his first cousin, against his parents wishes. Abe and Bertha went on to have two daughters.

He and Bertha moved to Wisconsin so that he could attend the University of Wisconsin. Here, he became interested in psychology, and his school work began to improve dramatically. He spent time there working with Harry Harlow, who is famous for his experiments with baby rhesus monkeys and attachment behavior.

He received his BA in 1930, his MA in 1931, and his PhD in 1934, all in psychology, all from the University of Wisconsin. A year after graduation, he returned to New York to work with E. L. Thorndike.
at Columbia, where Maslow became interested in research on human sexuality.

He began teaching full time at Brooklyn College. During this period of his life, he came into contact with the many European intellectuals that were immigrating to the US, and Brooklyn in particular, at that time -- people like Adler, Fromm, Horney, as well as several Gestalt and Freudian psychologists.

Maslow served as the chair of the psychology department at Brandeis from 1951 to 1969. While there he met Kurt Goldstein, who had originated the idea of self-actualization in his famous book, *The Organism* (1934). It was also here that he began his crusade for a humanistic psychology -- something ultimately much more important to him than his own theorizing.

He spend his final years in semi-retirement in California, until, on June 8 1970, he died of a heart attack after years of ill health.

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**Theory**

One of the many interesting things Maslow noticed while he worked with monkeys early in his career, was that some needs take precedence over others. For example, if you are hungry and thirsty, you will tend to try to take care of the thirst first. After all, you can do without food for weeks, but you can only do without water for a couple of days! Thirst is a “stronger” need than hunger. Likewise, if you are very very thirsty, but someone has put a choke hold on you and you can’t breathe, which is more important? The need to breathe, of course. On the other hand, sex is less powerful than any of these. Let’s face it, you won’t die if you don’t get it!
Maslow took this idea and created his now famous **hierarchy of needs**. Beyond the details of air, water, food, and sex, he laid out five broader layers: the physiological needs, the needs for safety and security, the needs for love and belonging, the needs for esteem, and the need to actualize the self, in that order.

1. **The physiological needs.** These include the needs we have for oxygen, water, protein, salt, sugar, calcium, and other minerals and vitamins. They also include the need to maintain a pH balance (getting too acidic or base will kill you) and temperature (98.6 or near to it). Also, there’s the need to be active, to rest, to sleep, to get rid of wastes (CO2, sweat, urine, and feces), to avoid pain, and to have sex. Quite a collection!

Maslow believed, and research supports him, that these are in fact individual needs, and that a lack of, say, vitamin C, will lead to a very specific hunger for things which have in the past provided that vitamin C -- e.g. orange juice. I guess the cravings that some pregnant women have, and the way in which babies eat the most foul tasting baby food, support the idea anecdotally.

2. **The safety and security needs.** When the physiological needs are largely taken care of, this second layer of needs comes into play. You will become increasingly interested in finding safe circumstances, stability, protection. You might develop a need for structure, for order, some limits.

Looking at it negatively, you become concerned, not with needs like hunger and thirst, but with your fears and anxieties. In the ordinary American adult, this set of needs manifest themselves in the form of our urges to have a home in a safe neighborhood, a little job security and a nest egg, a good retirement plan and a bit of insurance, and so on.

3. **The love and belonging needs.** When physiological needs and safety needs are, by and large, taken care of, a third layer starts to show up. You begin to feel the need for friends, a sweetheart, children, affectionate relationships in general, even a sense of community. Looked at negatively, you become increasing susceptible to loneliness and social anxieties.

In our day-to-day life, we exhibit these needs in our desires to marry, have a family, be a part of a community, a member of a church, a brother in the fraternity, a part of a gang or a bowling club. It is also a part of what we look for in a career.

4. **The esteem needs.** Next, we begin to look for a little self-esteem. Maslow noted two versions of esteem needs, a lower one and a higher one. The lower one is the need for the respect of others, the need for status, fame, glory, recognition, attention, reputation, appreciation, dignity, even dominance. The higher form involves the need for self-respect, including such feelings as confidence, competence, achievement, mastery, independence, and freedom. Note that this is the “higher” form because, unlike the respect of others, once you have self-respect, it’s a lot harder to lose!

The negative version of these needs is low self-esteem and inferiority complexes. Maslow felt that Adler was really onto something when he proposed that these were at the roots of
many, if not most, of our psychological problems. In modern countries, most of us have what we need in regard to our physiological and safety needs. We, more often than not, have quite a bit of love and belonging, too. It’s a little respect that often seems so very hard to get!

All of the preceding four levels he calls **deficit needs**, or **D-needs**. If you don’t have enough of something -- i.e. you have a deficit -- you feel the need. But if you get all you need, you feel nothing at all! In other words, they cease to be motivating. As the old blues song goes, “you don’t miss your water till your well runs dry.”

He also talks about these levels in terms of **homeostasis**. Homeostasis is the principle by which your furnace thermostat operates: When it gets too cold, it switches the heat on; When it gets too hot, it switches the heat off. In the same way, your body, when it lacks a certain substance, develops a hunger for it; When it gets enough of it, then the hunger stops. Maslow simply extends the homeostatic principle to needs, such as safety, belonging, and esteem, that we don’t ordinarily think of in these terms.

Maslow sees all these needs as essentially survival needs. Even love and esteem are needed for the maintenance of health. He says we all have these needs built in to us genetically, like instincts. In fact, he calls them **instinctoid** -- instinct-like -- needs.

In terms of overall development, we move through these levels a bit like stages. As newborns, our focus (if not our entire set of needs) is on the physiological. Soon, we begin to recognize that we need to be safe. Soon after that, we crave attention and affection. A bit later, we look for self-esteem. Mind you, this is in the first couple of years!

Under stressful conditions, or when survival is threatened, we can “regress” to a lower need level. When you great career falls flat, you might seek out a little attention. When your family ups and leaves you, it seems that love is again all you ever wanted. When you face chapter eleven after a long and happy life, you suddenly can’t think of anything except money.

These things can occur on a society-wide basis as well: When society suddenly flounders, people start clamoring for a strong leader to take over and make things right. When the
bombs start falling, they look for safety. When the food stops coming into the stores, their needs become even more basic.

Maslow suggested that we can ask people for their “philosophy of the future” -- what would their ideal life or world be like -- and get significant information as to what needs they do or do not have covered.

If you have significant problems along your development -- a period of extreme insecurity or hunger as a child, or the loss of a family member through death or divorce, or significant neglect or abuse -- you may “fixate” on that set of needs for the rest of your life.

This is Maslow’s understanding of neurosis. Perhaps you went through a war as a kid. Now you have everything your heart needs -- yet you still find yourself obsessing over having enough money and keeping the pantry well-stocked. Or perhaps your parents divorced when you were young. Now you have a wonderful spouse -- yet you get insanely jealous or worry constantly that they are going to leave you because you are not “good enough” for them. You get the picture.

Self-actualization

The last level is a bit different. Maslow has used a variety of terms to refer to this level: He has called it growth motivation (in contrast to deficit motivation), being needs (or B-needs, in contrast to D-needs), and self-actualization.

These are needs that do not involve balance or homeostasis. Once engaged, they continue to be felt. In fact, they are likely to become stronger as we “feed” them! They involve the continuous desire to fulfill potentials, to “be all that you can be.” They are a matter of becoming the most complete, the fullest, “you” -- hence the term, self-actualization.

Now, in keeping with his theory up to this point, if you want to be truly self-actualizing, you need to have your lower needs taken care of, at least to a considerable extent. This makes sense: If you are hungry, you are scrambling to get food; If you are unsafe, you have to be continuously on guard; If you are isolated and unloved, you have to satisfy that need; If you have a low sense of self-esteem, you have to be defensive or compensate. When lower needs are unmet, you can’t fully devote yourself to fulfilling your potentials.
It isn’t surprising, then, the world being as difficult as it is, that only a small percentage of the world’s population is truly, predominantly, self-actualizing. Maslow at one point suggested only about two percent!

The question becomes, of course, what exactly does Maslow mean by self-actualization. To answer that, we need to look at the kind of people he called self-actualizers. Fortunately, he did this for us, using a qualitative method called **biographical analysis**.

He began by picking out a group of people, some historical figures, some people he knew, whom he felt clearly met the standard of self-actualization. Included in this august group were Abraham Lincoln, Thomas Jefferson, Albert Einstein, Eleanor Roosevelt, Jane Adams, William James, Albert Schweitzer, Benedict Spinoza, and Aldous Huxley, plus 12 unnamed people who were alive at the time Maslow did his research. He then looked at their biographies, writings, the acts and words of those he knew personally, and so on. From these sources, he developed a list of qualities that seemed characteristic of these people, as opposed to the great mass of us.

These people were **reality-centered**, which means they could differentiate what is fake and dishonest from what is real and genuine. They were **problem-centered**, meaning they treated life’s difficulties as problems demanding solutions, not as personal troubles to be settled or surrendered to. And they had a **different perception of means and ends**. They felt that the ends don’t necessarily justify the means, that the means could be ends themselves, and that the means -- the journey -- was often more important than the ends.

The self-actualizers also had a different way of relating to others. First, they enjoyed **solitude**, and were comfortable being alone. And they enjoyed deeper **personal relations** with a few close friends and family members, rather than more shallow relationships with many people.

They enjoyed **autonomy**, a relative independence from physical and social needs. And they **resisted enculturation**, that is, they were not susceptible to social pressure to be "well adjusted" or to "fit in" -- they were, in fact, nonconformists in the best sense.

They had an **unhostile sense of humor** -- preferring to joke at their own expense, or at the human condition, and never directing their humor at others. They had a quality he called **acceptance of self and others**, by which he meant that these people would be more likely to take you as you are than try to change you into what they thought you should be. This same acceptance applied to their attitudes towards themselves: If some quality of theirs wasn’t harmful, they let it be, even enjoying it as a personal quirk. On the other hand, they were often strongly motivated to change negative qualities in themselves that could be changed. Along with this comes **spontaneity and simplicity**: They preferred being themselves rather than being pretentious or artificial. In fact, for all their nonconformity, he found that they tended to be conventional on the surface, just where less self-actualizing nonconformists tend to be the most dramatic.
Further, they had a sense of **humility and respect** towards others -- something Maslow also called democratic values -- meaning that they were open to ethnic and individual variety, even treasuring it. They had a quality Maslow called **human kinship** or **Gemeinschaftsgfühl** -- social interest, compassion, humanity. And this was accompanied by a **strong ethics**, which was spiritual but seldom conventionally religious in nature.

And these people had a certain **freshness of appreciation**, an ability to see things, even ordinary things, with wonder. Along with this comes their ability to be **creative**, inventive, and original. And, finally, these people tended to have more **peak experiences** than the average person. A peak experience is one that takes you out of yourself, that makes you feel very tiny, or very large, to some extent one with life or nature or God. It gives you a feeling of being a part of the infinite and the eternal. These experiences tend to leave their mark on a person, change them for the better, and many people actively seek them out. They are also called mystical experiences, and are an important part of many religious and philosophical traditions.

Maslow doesn’t think that self-actualizers are perfect, of course. There were several flaws or **imperfections** he discovered along the way as well: First, they often suffered considerable anxiety and guilt -- but realistic anxiety and guilt, rather than misplaced or neurotic versions. Some of them were absentminded and overly kind. And finally, some of them had unexpected moments of ruthlessness, surgical coldness, and loss of humor.

Two other points he makes about these self-actualizers: Their values were "natural" and seemed to flow effortlessly from their personalities. And they appeared to transcend many of the dichotomies others accept as being undeniable, such as the differences between the spiritual and the physical, the selfish and the unselfish, and the masculine and the feminine.

**Metaneeds and metapathologies**

Another way in which Maslow approaches the problem of what is self-actualization is to talk about the special, driving needs (B-needs, of course) of the self-actualizers. They need the following in their lives in order to be happy:

- **Truth**, rather than dishonesty.
- **Goodness**, rather than evil.
- **Beauty**, not ugliness or vulgarity.
- **Unity, wholeness, and transcendence of opposites**, not arbitrariness or forced choices.
- **Aliveness**, not deadness or the mechanization of life.
- **Uniqueness**, not bland uniformity.
- **Perfection and necessity**, not sloppiness, inconsistency, or accident.
- **Completion**, rather than incompleteness.
- **Justice and order**, not injustice and lawlessness.
- **Simplicity**, not unnecessary complexity.
- **Richness**, not environmental impoverishment.
- **Effortlessness**, not strain.
- **Playfulness**, not grim, humorless, drudgery.
**Self-sufficiency**, not dependency.  
**Meaningfulness**, rather than senselessness.

At first glance, you might think that everyone obviously needs these. But think: If you are living through an economic depression or a war, or are living in a ghetto or in rural poverty, do you worry about these issues, or do you worry about getting enough to eat and a roof over your head? In fact, Maslow believes that much of the what is wrong with the world comes down to the fact that very few people really are interested in these values -- not because they are bad people, but because they haven’t even had their basic needs taken care of!

When a self-actualizer doesn’t get these needs fulfilled, they respond with **metapathologies** -- a list of problems as long as the list of metaneeds! Let me summarize it by saying that, when forced to live without these values, the self-actualizer develops depression, despair, disgust, alienation, and a degree of cynicism.

Maslow hoped that his efforts at describing the self-actualizing person would eventually lead to a “periodic table” of the kinds of qualities, problems, pathologies, and even solutions characteristic of higher levels of human potential. Over time, he devoted increasing attention, not to his own theory, but to humanistic psychology and the human potentials movement.

Toward the end of his life, he inaugurated what he called the **fourth force** in psychology: Freudian and other “depth” psychologies constituted the first force; Behaviorism was the second force; His own humanism, including the European existentialists, were the third force. The fourth force was the **transpersonal psychologies** which, taking their cue from Eastern philosophies, investigated such things as meditation, higher levels of consciousness, and even parapsychological phenomena. Perhaps the best known transpersonalist today is Ken Wilber, author of such books as *The Atman Project* and *The History of Everything.*

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**Discussion**

Maslow has been a very inspirational figure in personality theories. In the 1960’s in particular, people were tired of the reductionistic, mechanistic messages of the behaviorists and physiological psychologists. They were looking for meaning and purpose in their lives, even a higher, more mystical meaning. Maslow was one of the pioneers in that movement to bring the human being back into psychology, and the person back into personality!

At approximately the same time, another movement was getting underway, one inspired by some of the very things that turned Maslow off: computers and information processing, as well as very rationalistic theories such as Piaget’s cognitive development theory and Noam Chomsky’s linguistics. This, of course, became the cognitive movement in psychology. As
the heyday of humanism appeared to lead to little more than drug abuse, astrology, and self indulgence, cognitivism provided the scientific ground students of psychology were yearning for.

But the message should not be lost: Psychology is, first and foremost, about people, real people in real lives, and not about computer models, statistical analyses, rat behavior, test scores, and laboratories.

Some criticism

The “big picture” aside, there are a few criticisms we might direct at Maslow’s theory itself. The most common criticism concerns his methodology: Picking a small number of people that he himself declared self-actualizing, then reading about them or talking with them, and coming to conclusions about what self-actualization is in the first place does not sound like good science to many people.

In his defense, I should point out that he understood this, and thought of his work as simply pointing the way. He hoped that others would take up the cause and complete what he had begun in a more rigorous fashion. It is a curiosity that Maslow, the “father” of American humanism, began his career as a behaviorist with a strong physiological bent. He did indeed believe in science, and often grounded his ideas in biology. He only meant to broaden psychology to include the best in us, as well as the pathological!

Another criticism, a little harder to respond to, is that Maslow placed such constraints on self-actualization. First, Kurt Goldstein and Carl Rogers used the phrase to refer to what every living creature does: To try to grow, to become more, to fulfill its biological destiny. Maslow limits it to something only two percent of the human species achieves. And while Rogers felt that babies were the best examples of human self-actualization, Maslow saw it as something achieved only rarely by the young.

Another point is that he asks that we pretty much take care of our lower needs before self-actualization comes to the forefront. And yet we can find many examples of people who exhibited at very least aspects of self-actualization who were far from having their lower needs taken care of. Many of our best artists and authors, for example, suffered from poverty, bad upbringing, neuroses, and depression. Some could even be called psychotic! If you think about Galileo, who prayed for ideas that would sell, or Rembrandt, who could barely keep food on the table, or Toulouse Lautrec, whose body tormented him, or van Gogh, who, besides poor, wasn’t quite right in the head, if you know what I mean... Weren’t these people engaged in some form of self-actualization? The idea of artists and poets and philosophers (and psychologists!) being strange is so common because it has so much truth to it!

We also have the example of a number of people who were creative in some fashion even while in concentration camps. Trachtenberg, for example, developed a new way of doing arithmetic in a camp. Viktor Frankl developed his approach to therapy while in a camp. There are many more examples.
And there are examples of people who were creative when unknown, became successful only to stop being creative. Ernest Hemingway, if I’m not mistaken, is an example. Perhaps all these examples are exceptions, and the hierarchy of needs stands up well to the general trend. But the exceptions certainly do put some doubt into our minds.

I would like to suggest a variation on Maslow’s theory that might help. If we take the idea of actualization as Goldstein and Rogers use it, i.e. as the "life force" that drives all creatures, we can also acknowledge that there are various things that interfere with the full effectiveness of that life force. If we are deprived of our basic physical needs, if we are living under threatening circumstances, if we are isolated from others, or if we have no confidence in our abilities, we may continue to survive, but it will not be as fulfilling a life as it could be. We will not be fully actualizing our potentials! We could even understand that there might be people that actualize despite deprivation! If we take the deficit needs as subtracting from actualization, and if we talk about full self-actualization rather than self-actualization as a separate category of need, Maslow’s theory comes into line with other theories, and the exceptional people who succeed in the face of adversity can be seen as heroic rather than freakish aberrations.

I received the following email from Gareth Costello of Dublin, Ireland, which balances my somewhat negative review of Maslow:

One mild criticism I would have is of your concluding assessment, where you appeal for a broader view of self-actualisation that could include subjects such as van Gogh and other hard-at-heel intellectual/creative giants. This appears to be based on a view that people like van Gogh, etc. were, by virtue of their enormous creativity, 'at least partly' self-actualised.

I favour Maslow’s more narrow definition of self-actualisation and would not agree that self-actualisation equates with supreme self-expression. I suspect that self-actualisation is, often, a demotivating factor where artistic creativity is concerned, and that artists such as van Gogh thrived (artistically, if not in other respects) specifically in the absence of circumstances conducive to self-actualisation. Even financially successful artists (e.g. Stravinsky, who was famously good at looking after his financial affairs, as well as affairs of other kinds) do exhibit some of the non-self-actualised 'motivators' that you describe so well.

Self-actualisation implies an outwardness and openness that contrasts with the introspection that can be a prerequisite for great artistic self-expression. Where scientists can look out at the world around them to find something of profound or universal significance, great artists usually look inside themselves to find something of personal significance - the universality of their work is important but secondary. It’s interesting that Maslow seems to have concentrated on people concerned with the big-picture when defining
self-actualisation. In Einstein, he selected a scientist who was striving for a theory of the entire physical universe. The philosophers and politicians he analysed were concerned with issues of great relevance to humanity.

This is not to belittle the value or importance of the ‘small-picture’ - society needs splitters as well as lumpers. But while self-actualisation may be synonymous with psychological balance and health, it does not necessarily lead to professional or creative brilliance in all fields. In some instances, it may remove the driving force that leads people to excel -- art being the classic example. So I don’t agree that the scope of self-actualisation should be extended to include people who may well have been brilliant, but who were also quite possibly damaged, unrounded or unhappy human beings.

If I had the opportunity to chose between brilliance (alone) or self-actualisation (alone) for my children, I would go for the latter!

Gareth makes some very good points!

**Rollo May**

Rollo May (April 21, 1909 – October 22, 1994) was an American existential psychologist. He authored the influential book Love and Will during 1969. He is often associated with both humanistic psychology and existentialist philosophy. May was a close friend of the theologian Paul Tillich. His works include Love and Will and The Courage to Create, the latter title honoring Tillich’s The Courage to Be.

**Biography**

May was born in Ada, Ohio in 1909. He experienced a difficult childhood, with his parents divorcing and his sister becoming schizophrenic. His educational career took him to Michigan State College majoring in English and Oberlin College for a bachelor’s degree, teaching for a time in Greece, to Union Theological Seminary for a BD during 1938, and finally to Teachers College, Columbia University for a PhD in clinical psychology during 1949. May was a founder and faculty member of Saybrook Graduate School and Research Center in San Francisco.

He spent the final years of his life in Tiburon on San Francisco Bay, where he died in October 1994.

**Accomplishments**

May was influenced by American humanism, and interested in reconciling existential psychology with other philosophies, especially Freud's.
May considered Otto Rank (1884-1939) to be the most important precursor of existential therapy. Shortly before his death, May wrote the foreword to Robert Kramer's edited collection of Rank's American lectures. "I have long considered Otto Rank to be the great unacknowledged genius in Freud's circle," wrote May (Rank, 1996, p. xi).

May used some traditional existential terms in a slightly different fashion than others, and he invented new words for traditional existentialist concepts. Destiny, for example, could be "thrownness" combined with "fallenness" — the part of our lives that is determined for us, for the purpose of creating our lives. He also used the word "courage" to signify resisting anxiety.

He defined certain "stages" of development:

- **Innocence** – the pre-egoic, pre-self-conscious stage of the infant. An innocent is only doing what he or she must do. However, an innocent does have a degree of will in the sense of a drive to fulfill needs.

- **Rebellion** – the rebellious person wants freedom, but does not yet have a good understanding of the responsibility that goes with it.

- **Decision** – The person is in a transition stage in their life such that they need to be more independent from their parents and settle into the "ordinary stage". In this stage they must decide what to do with their life, and fulfilling rebellious needs from the rebellious stage.

- **Ordinary** – the normal adult ego learned responsibility, but finds it too demanding, and so seeks refuge in conformity and traditional values.

- **Creative** – the authentic adult, the existential stage, self-actualizing and transcending simple egocentrism.

These are not "stages" in the traditional sense. A child may certainly be innocent, ordinary or creative at times; an adult may be rebellious. The only association with certain ages is in terms of importance: rebelliousness is more important for a two year old or a teenager.

May perceived the sexual mores of the 1960s and 1970s, as well as commercialization of sex and pornography, as having influenced society such that people believed that love and sex are no longer associated directly. According to May, emotion has become separated from reason, making it acceptable socially to seek sexual relationships and avoid the natural drive to relate to another person and create new life. May believed that sexual freedom can cause modern society to neglect more important psychological developments. May suggests that the only way to remedy the cynical ideas that characterize our times is to rediscover the importance of caring for another, which May describes as the opposite of apathy.
His first book, The Meaning of Anxiety, was based on his doctoral dissertation, which in turn was based on his reading of the 19th century philosopher Søren Kierkegaard. His definition of anxiety is "the apprehension cued off by a threat to some value which the individual holds essential to his existence as a self" (1967, p. 72). He also quotes Kierkegaard: "Anxiety is the dizziness of freedom". In 1956, he edited the book Existence with Ernest Angel and Henri Ellenberger. Existence helped introduce existential psychology to the US.

ROLLO MAY: Summarized

1909 - 1994

Dr. C. George Boeree

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**Biography**

Rollo May was born April 21, 1909, in Ada, Ohio. His childhood was not particularly pleasant: His parents didn't get along and eventually divorced, and his sister had a psychotic breakdown.

After a brief stint at Michigan State (he was asked to leave because of his involvement with a radical student magazine), he attended Oberlin College in Ohio, where he received his bachelors degree.

After graduation, he went to Greece, where he taught English at Anatolia College for three years. During this period, he also spent time as an itinerant artist and even studied briefly with Alfred Adler.

When he returned to the US, he entered Union Theological Seminary and became friends with one of his teachers, Paul Tillich, the existentialist theologian, who would have a profound effect on his thinking. May received his BD in 1938.

May suffered from tuberculosis, and had to spend three years in a sanatorium. This was probably the turning point of his life. While he faced the possibility of death, he also filled his empty hours with reading. Among the literature he read were the writings of Soren Kierkegaard, the Danish religious writer who inspired much of the existential movement, and provided the inspiration for May's theory.

He went on to study psychoanalysis at White Institute, where he
met people such as Harry Stack Sullivan and Erich Fromm. And finally, he went to Columbia University in New York, where in 1949 he received the first PhD in clinical psychology that institution ever awarded.

After receiving his PhD, he went on to teach at a variety of top schools. In 1958, he edited, with Ernest Angel and Henri Ellenberger, the book Existence, which introduced existential psychology to the US. He spent the last years of his life in Tiburon, California, until he died in October of 1994.

Theory

Rollo May is the best known American existential psychologist. Much of his thinking can be understood by reading about existentialism in general, and the overlap between his ideas and the ideas of Ludwig Binswanger is great. Nevertheless, he is a little off of the mainstream in that he was more influenced by American humanism than the Europeans, and more interested in reconciling existential psychology with other approaches, especially Freud’s.

May uses some traditional existential terms slightly differently than others, and invents new words for some of existentialism’s old ideas. Destiny, for example, is roughly the same as thrownness combined with fallenness. It is that part of our lives that is determined for us, our raw materials, if you like, for the project of creating our lives. Another example is the word courage, which he uses more often than the traditional term "authenticity" to mean facing one’s anxiety and rising above it.

He is also the only existential psychologist I’m aware of who discusses certain “stages” (not in the strict Freudian sense, of course) of development:

**Innocence** -- the pre-egoic, pre-self-conscious stage of the infant. The innocent is premoral, i.e. is neither bad nor good. Like a wild animal who kills to eat, the innocent is only doing what he or she must do. But an innocent does have a degree of will in the sense of a drive to fulfil their needs!

**Rebellion** -- the childhood and adolescent stage of developing one’s ego or self-consciousness by means of contrast with adults, from the “no” of the two year old to the “no way” of the teenager. The rebellious person wants freedom, but has as yet no full understanding of the responsibility that goes with it. The teenager may want to spend their allowance in any way they choose -- yet they still expect the parent to provide the money, and will complain about unfairness if they don’t get it!

**Ordinary** -- the normal adult ego, conventional and a little boring, perhaps. They have learned responsibility, but find it too demanding, and so seek refuge in conformity and traditional values.
Creative -- the authentic adult, the existential stage, beyond ego and self-actualizing. This is the person who, accepting destiny, faces anxiety with courage!

These are not stages in the traditional sense. A child may certainly be innocent, ordinary or creative at times; An adult may be rebellious. The only attachments to certain ages is in terms of salience: Rebelliousness stands out in the two year old and the teenager!

On the other hand, he is every bit as interested in anxiety as any existentialist. His first book, The Meaning of Anxiety, was based on his doctoral dissertation, which in turn was based on his reading of Kierkegaard. His definition of anxiety is “the apprehension cued off by a threat to some value which the individual holds essential to his existence as a self” (1967, p. 72). While not “pure” existentialism, it does obviously include fear of death or “nothingness.” Later, he quotes Kierkegaard: “Anxiety is the dizziness of freedom.”

Love and Will

Many of May’s unique ideas can be found in the book I consider his best, Love and Will. In his efforts at reconciling Freud and the existentialists, he turns his attention to motivation. His basic motivational construct is the daimonic. The daimonic is the entire system of motives, different for each individual. It is composed of a collection of specific motives called daimons.

The word daimon is from the Greek, and means little god. It comes to us as demon, with a very negative connotation. But originally, a daimon could be bad or good. Daimons include lower needs, such as food and sex, as well as higher needs, such as love. Basically, he says, a daimon is anything that can take over the person, a situation he refers to as daimonic possession. It is then, when the balance among daimons is disrupted, that they should be considered “evil” -- as the phrase implies! This idea is similar to Binswanger's idea of themes, or Horney's idea of coping strategies.

For May, one of the most important daimons is eros. Eros is love (not sex), and in Greek mythology was a minor god pictured as a young man. (See the story of Eros and Psyche by clicking here!) Later, Eros would be transformed into that annoying little pest, Cupid. May understood love as the need we have to “become one” with another person, and refers to an ancient Greek story by Aristophanes: People were originally four-legged, four-armed, two-headed creatures. When we became a little too pridelful, the gods split us in two, male and female, and cursed us with the never-ending desire to recover our missing half!

Anyway, like any daimon, eros is a good thing until it takes over the personality, until we become obsessed with it.

Another important concept for May is will: The ability to organize oneself in order to achieve one’s goals. This makes will roughly synonymous with ego and reality-testing, but with its own store of energy, as in ego psychology. I suspect he got the notion from Otto Rank, who uses will in the same way. May hints that will, too, is a daimon that can potentially take over the person.
Another definition of will is “the ability to make wishes come true.” Wishes are “playful imaginings of possibilities,” and are manifestations of our daimons. Many wishes, of course, come from eros. But they require will to make them happen! Hence, we can see three “personality types” coming out of our relative supply, you might say, of our wishes for love and the will to realize them. Note that he doesn’t actually come out and name them -- that would be too categorical for an existentialist -- and they are not either-or pigeon holes by any means. But he does use various terms to refer to them, and I have picked representative ones.

There is the type he refers to as “neo-Puritan,” who is all will, but no love. They have amazing self-discipline, and can “make things happen”... but they have no wishes to act upon. So they become “anal” and perfectionistic, but empty and “dried-up.” The archetypal example is Ebenezer Scrooge.

The second type he refers to as “infantile.” They are all wishes but no will. Filled with dreams and desires, they don’t have the self-discipline to make anything of their dreams and desires, and so become dependent and conformist. They love, but their love means little. Perhaps Homer Simpson is the clearest example!

The last type is the "creative" type. May recommends, wisely, that we should cultivate a balance of these two aspects of our personalities. He said “Man’s task is to unite love and will.” This idea is, in fact, an old one that we find among quite a few theorists. Otto Rank, for example, makes the same contrast with death (which includes both our need for others and our fear of life) and life (which includes both our need for autonomy and our fear of loneliness). Other theorists have talked about communion and agency, homonymy and autonomy, nurturance and assertiveness, affiliation and achievement, and so on.

Myths

May’s last book was The Cry for Myth. He pointed out that a big problem in the twentieth century was our loss of values. All the different values around us lead us to doubt all values. As Nietzsche pointed out, if God is dead (i.e. absolutes are gone), then anything is permitted!

May says we have to create our own values, each of us individually. This, of course, is difficult to say the least. So we need help, not forced on us, but “offered up” for us to use as we will.

Enter myths, stories that help us to “make sense” out of our lives, “guiding narratives.” They resemble to some extent Jung’s archetypes, but they can be conscious and unconscious, collective and personal. A good example is how many people live their lives based on stories from the Bible.

Other examples you may be familiar with include Horatio Alger, Oedipus Rex, Sisyphus, Romeo and Juliet, Casablanca, Leave it to Beaver, Star Wars, Little House on the Prairie, The Simpsons, South Park, and the fables of Aesop. As I intentionally suggest with this list, a lot
of stories make lousy myths. Many stories emphasize the magical granting of one’s wishes (infantile). Others promise success in exchange for hard work and self-sacrifice (neo-Puritan). Many of our stories today say that valuelessness is itself the best value! Instead, says May, we should be actively working to create new myths that support people’s efforts at making the best of life, instead of undermining them!

The idea sounds good -- but it isn’t terribly existential! Most existentialists feel that it is necessary to face reality much more directly than “myths” imply. In fact, they sound a little too much like what the great mass of people succumb to as a part of fallenness, conventionality, and inauthenticity! A controversy for the future....

GEORGE KELLY: Personal Construct Approach to Personality

1905 - 1967

Dr. C. George Boeree

George Kelly was teaching physiological psychology at Fort Hays Kansas State College in 1931. It was the time of the dust bowl and the Depression. Recognizing the pains and sorrows of the farming families of this part of west-central Kansas, he decided to do something a little more humanitarian with his life. He decided to develop a rural clinical service.

Mind you, this was hardly a money-making operation. Many of his clients had no money. Some couldn’t come to him, and so he and his students would travel, sometimes for hours, to them.

At first, Kelly used the standard Freudian training that every psychology Ph.D. received in those days. He had these folks lie down on a couch, free associate, and tell him their dreams. When he saw resistances or symbols of sexual and aggressive needs, he would patiently convey his impressions to them. It was surprising, he thought, how readily these relatively unsophisticated people took to these explanations of their problems. Surely, given their culture, the standard Freudian interpretations should seem terribly bizarre? Apparently, they placed their faith in him, the professional.

Kelly himself, however, wasn’t so sure about these standard Freudian explanations. He found them a bit far-fetched at times, not quite appropriate to the lives of Kansan farm families. So, as time went by, he noticed that his interpretations of dreams and such were becoming increasingly unorthodox. In fact, he began "making up" explanations! His clients listened as carefully as before, believed in him as much as ever, and improved at the same slow but steady pace.
It began to occur to him that what truly mattered to these people was that they had an explanation of their difficulties, that they had a way of understanding them. What mattered was that the "chaos" of their lives developed some order. And he discovered that, while just about any order and understanding that came from an authority was accepted gladly, order and understanding that came out of their own lives, their own culture, was even better.

Out of these insights, Kelly developed his theory and philosophy. The theory we'll get to in a while. The philosophy he called constructive alternativism. Constructive alternativism is the idea that, while there is only one true reality, reality is always experienced from one or another perspective, or alternative construction. I have a construction, you have one, a person on the other side of the planet has one, someone living long ago had one, a primitive person has one, a modern scientist has one, every child has one, even someone who is seriously mentally ill has one.

Some constructions are better than others. Mine, I hope, is better than that of someone who is seriously mentally ill. My physician's construction of my ills is better, I trust, than the construction of the local faith healer. Yet no-one's construction is ever complete -- the world is just too complicated, too big, for anyone to have the perfect perspective. And no-one's perspective is ever to be completely ignored. Each perspective is, in fact, a perspective on the ultimate reality, and has some value to that person in that time and place.

In fact, Kelly says, there are an infinite number of alternative constructions one may take towards the world, and if ours is not doing a very good job, we can take another!

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**Biography**

George Kelly was born on April 28, 1905, on a farm near Perth, Kansas. He was the only child of Theodore and Elfleda Kelly. His father was originally a presbyterian minister who had taken up farming on his doctor's advice. His mother was a former school teacher.

George’s schooling was erratic at best. His family moved, by covered wagon, to Colorado when George was young, but they were forced to return to Kansas when water became scarce. From then on, George attended mostly one room schools. Fortunately, both his parents took part in his education. When he was thirteen, he was finally sent off to boarding school in Wichita.

After high school, Kelly was a good example of someone who was both interested in everything and basically directionless. He received a bachelor’s degree in 1926 in physics and math from Park College, followed with a master’s in sociology from the University of Kansas. Moving to Minnesota, he taught public speaking to labor organizers and bankers and citizenship classes to immigrants.
He moved to Sheldon, Iowa, where he taught and coached drama at a junior college, and met his wife-to-be, Gladys Thompson. After a few short-term jobs, he received a fellowship to go to the University of Edinburgh, where he received a bachelor of education degree in psychology. In 1931, he received his Ph.D. in psychology from the State University of Iowa.

Then, during the depression, he worked at Fort Hays Kansas State College, where he developed his theory and clinical techniques. During World War II, Kelly served as an aviation psychologist with the Navy, followed by a stint at the University of Maryland.

In 1946, he left for Ohio State University, the year after Carl Rogers left, and became the director of its clinical program. It was here that his theory matured, where he wrote his two-volume work, The Psychology of Personal Constructs, and where he influenced a number of graduate students.

In 1965, he began a research position at Brandeis University, where Maslow was working. Sadly, he died soon afterward, on March 6, 1967.

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**Theory**

Kelly's theory begins with what he called his "fruitful metaphor." He had noticed long before that scientists, and therapists, often displayed a peculiar attitude towards people: While they thought quite well of themselves, they tended to look down on their subjects or clients. While they saw themselves as engaged in the fine arts of reason and empiricism, they tended to see ordinary people as the victims of their sexual energies or conditioning histories. But Kelly, with his experience with Kansan students and farm people, noted that these ordinary people, too, were engaged in science; they, too, were trying to understand what was going on.

So people -- ordinary people -- are scientists, too. The have constructions of their reality, like scientists have theories. They have anticipations or expectations, like scientists have hypotheses. They engage in behaviors that test those expectations, like scientists do experiments. They improve their understandings of reality on the bases of their experiences, like scientists adjust their theories to fit the facts. From this metaphor comes Kelly's entire theory.
The fundamental postulate

Kelly organized his theory into a **fundamental postulate** and **11 corollaries**. His fundamental postulate says this: "A person’s processes are psychologically channelized by the ways in which he anticipates events." (This and all subsequent quotations are from Kelly’s 1955 *The Psychology of Personal Constructs.*) This is the central movement in the scientific process: from hypothesis to experiment or observation, i.e. from anticipation to experience and behavior.

By processes, Kelly means your experiences, thoughts, feelings, behaviors, and whatever might be left over. All these things are determined, not just by the reality out there, but by your efforts to **anticipate** the world, other people, and yourself, from moment to moment as well as day-to-day and year-to-year.

So, when I look out of my window to find the source of some high-pitched noises, I don’t just see exactly and completely what is out there. I see that which is in keeping with my expectations. I am ready for birds, perhaps, or children laughing and playing. I am not prepared for a bulldozer that operates with a squal rather than the usual rumbling, or for a flying saucer landing in my yard. If a UFO were in fact the source of the high-pitched noises, I would not truly perceive it at first. I’d perceive something. I’d be confused and frightened. I’d try to figure out what I’m looking at. I’d engage in all sorts of behaviors to help me figure it out, or to get me away from the source of my anxiety! Only after a bit would I be able to find the right anticipation, the right hypothesis: "Oh my God, it’s a UFO!"

If, of course, UFO’s were a common place occurrence in my world, upon hearing high-pitched noises I would anticipate birds, kids, or a UFO, an anticipation that could then be quickly refined with a glance out of the window.
The construction corollary

"A person anticipates events by construing their replications."

That is, we construct our anticipations using our past experience. We are fundamentally conservative creatures; we expect things to happen as they’ve happened before. We look for the patterns, the consistencies, in our experiences. If I set my alarm clock, I expect it to ring at the right time, as it has done since time immemorial. If I behave nicely to someone, I expect them to behave nicely back.

This is the step from theory to hypothesis, i.e. from construction system (knowledge, understanding) to anticipation.

The experience corollary

"A person's construction system varies as he successively construes the replication of events."

When things don’t happen the way they have in the past, we have to adapt, to reconstruct. This new experience alters our future anticipations. We learn.

This is the step from experiment and observation to validation or reconstruction: Based on the results of our experiment -- the behaviors we engage in -- or our observation -- the experiences we have -- we either continue our faith in our theory of reality, or we change the theory.

The dichotomy corollary

"A person's construction system is composed of a finite number of dichotomous constructs."

We store our experience in the form of constructs, which he also referred to as "useful concepts," "convenient fictions," and "transparent templates." You "place" these "templates" on the world, and they guide your perceptions and behaviors.

He often calls them personal constructs, emphasizing the fact that they are yours and yours alone, unique to you and no-one else. A construct is not some label or pigeon-hole or dimension I, as a psychologist, lay on you, the "ordinary" person. It is a small bit of how you see the world.

He also calls them bipolar constructs, to emphasize their dichotomous nature. They have two ends, or poles: Where there is thin, there must be fat, where there is tall, there must be short, where there is up, there must be down, and so on. If everyone were fat, then fat would become meaningless, or identical in meaning to "everyone." Some people must be skinny in order for fat to have any meaning, and vice versa!
This is actually a very old insight. In ancient China, for example, philosophers made much of yin and yang, the opposites that together make the whole. More recently, Carl Jung talks about it a great deal. Linguists and anthropologists accept it as a given part of language and culture.

A number of psychologists, most notably Gestalt psychologists, have pointed out that we don’t so much associate separate things as differentiate things out of a more-or-less whole background. First you see a lot of undifferentiated "stuff" going on (a "buzzing, blooming confusion," as William James called it). Then you learn to pick out of that "stuff" the things that are important, that make a difference, that have meaning for you. The young child doesn’t care if you are fat or thin, black or white, rich or poor, Jew or Gentile; Only when the people around him or her convey their prejudices, does the child begin to notice these things.

Many constructs have names or are easily nameable: good-bad, happy-sad, introvert-extravert, flourescent-incandescent.... But they need not! They can be unnamed. Babies, even animals, have constructs: food-l-like vs. food-l-spit-out, danger vs. safety, Mommy vs. stranger.

Probably, most of our constructs are non-verbal. Think of all the habits that you have that you don’t name, such as the detailed movements involved in driving a car. Think about the things you recognize but don’t name, such as the formation just beneath your nose? (It’s called a philtrum.) Or think about all the subtleties of a feeling like "falling in love."

This is as close as Kelly comes to distinguishing a conscious and an unconscious mind: Constructs with names are more easily thought about. They are certainly more easily talked about! It’s as if a name is a handle by which you can grab onto a construct, move it around, show it to others, and so on. And yet a construct that has no name is still "there," and can have every bit as great an effect on your life!

Sometimes, although a construct has names, we pretend to ourselves that one pole doesn’t really refer to anything or anybody. For example, a person might say that there aren’t any truly bad people in the world. Kelly would say that he or she has submerged this pole -- something similar to repression.

It might be, you see, that for this person to acknowledge the meaningfulness of "bad" would require them to acknowledge a lot more: Perhaps mom would have to be labeled bad, or dad, or me! Rather than admit something like this, he or she would rather stop using the construct. Sadly, the construct is still there, and shows up in the person’s behaviors and feelings.

One more differentiation Kelly makes in regards to constructs is between peripheral and core constructs. Peripheral constructs are most constructs about the world, others, and even one’s self. Core constructs, on the other hand, are the constructs that are most significant to you, that to one extent or another actually define who you are. Write down
the first 10 or 20 adjectives that occur to you about yourself -- these may very well represent core constructs. Core constructs is the closest Kelly comes to talking about a self.

The organization corollary

"Each person characteristically evolves, for his convenience in anticipating events, a construction system embracing ordinal relationships between constructs."

Constructs are not just floating around unconnected. If they were, you wouldn't be able to use one piece of information to get to another -- you wouldn't be able to anticipate! When you are talked into a blind date, and your friend spends a great deal of energy trying to convince you that the person you will be going out with has a great personality, you know, you just know, that they will turn out to look like Quasimodo. How do you get from "great personality" to "Quasimodo?" Organization!

Some constructs are subordinate to, or "under," other constructs. There are two versions of this. First, there's a taxonomic kind of subordination, like the "trees" of animal or plant life you learned in high school biology. There are living things vs. non-living things, for example; subordinate to living things are, say, plants vs. animals; under plants, there might be trees vs. flowers; under trees, there might be conifers vs. deciduous trees; and so on.

Mind you, these are personal constructs, not scientific constructs, and so this is a personal taxonomy as well. It may be the same as the scientific one in your biology textbook, or it might not be. I still tend to have a species of conifer called Christmas trees.

```
animals -- plants
   |
flowers -- trees
   |
   deciduous -- conifers
   |
Christmas trees -- others
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There is also a definitional kind of subordination, called constellation. This involves stacks of constructs, with all their poles aligned. For example, beneath the construct conifers vs. deciduous trees, we may find soft-wood vs. hard-wood, needle-bearing vs. leaf-bearing, cone-bearing vs. flower-bearing, and so on.

```
conifers -- deciduous
   |   |   |
soft-wood -- hard-wood
   |   |   |
needle-bearing -- leaf-bearing
   |   |   |
cone-bearing -- flower-bearing
```

This is also the basis for stereotyping: "We" are good, clean, smart, moral, etc., while "they" are bad, dirty, dumb, immoral, etc.
Many constructs, of course, are independent of each other. Plants-animals is independent of flourescent-incandescent, to give an obvious example.

Sometimes, the relationship between two constructs is very tight. If one construct is consistently used to predict another, you have tight construction. Prejudice would be an example: As soon as you have a label for someone, you automatically assume other things about that person as well. You "jump to conclusions."

When we "do" science, we need to use tight construction. We call this "rigorous thinking," and it is a good thing. Who, after all, would want an engineer to build bridges using scientific rules that only maybe work. People who think of themselves as realistic often prefer tight construction.

But it is a small step from rigorous and realistic to rigid. And this rigidity can become pathological, so that an obsessive-compulsive person has to do things "just so" or break out in anxiety.

On the other hand, sometimes the relationship between constructs is left loose: There is a connection, but it is not absolute, not quite necessary. Loose construction is a more flexible way of using constructs. When we go to another country, for example, with some preconceptions about the people. These preconceptions would be prejudicial stereotypes, if we construed them tightly. But if we use them loosely, they merely help us to behave more appropriately in their culture.

We use loose construction when we fantasize and dream, when anticipations are broken freely and odd combinations are permitted. However, if we use loose construction too often and inappropriately, we appear flaky rather than flexible. Taken far enough, loose construction will land you in an institution.

The creativity cycle makes use of these ideas. When we are being creative, we first loosen our constructions -- fantasizing and brainstorming alternative constructions. When we find a novel construction that looks like it has some potential, we focus on it and tighten it up. We use the creativity cycle (obviously) in the arts. First we loosen up and get creative in the simplest sense; then tighten things up and give our creations substance. We conceive the idea, then give it form.

We use the creativity cycle in therapy, too. We let go of our unsuccessful models of reality, let our constructs drift, find a novel configuration, pull it into more rigorous shape, and try it out! We'll get back to this later.

The range corollary

"A construct is convenient for the anticipation of a finite range of events only."

No construct is useful for everything. The gender construct (male-female) is, for most of us, something of importance only with people and a few higher animals such as our pets and
cattle. Few of us care what sex flies are, or lizards, or even armadillos. And no-one, I think, applies gender to geological formations or political parties. These things are beyond the range of convenience of the gender construct.

Some constructs are very comprehensive, or broad in application. Good-bad is perhaps the most comprehensive construct of all, being applicable to nearly anything. Other constructs are very incidental, or narrow. Flourescent-incandescent is fairly narrow, applicable only to light bulbs.

But notice that what is relatively narrow for you might be relatively broad for me. A biologist will be interested in the gender of flies, lizards, armadillos, apple trees, philodendra, and so on. Or a philosopher may restrict his or her use of good-bad to specifically moral behaviors, rather than to all kinds of things, people, or beliefs.

The modulation corollary

"The variation in a person’s construction system is limited by the permeability of the constructs within whose range of convenience the variants lie."

Some constructs are "springy," they "modulate," they are permeable, which means that they are open to increased range. Other constructs are relatively impermeable.

For example, good-bad is generally quite permeable for most of us. We are always adding new elements: We may never have seen a computer before, or a CD player, or a fax machine, but as soon as we have, we want to know the best brand to buy. Likewise, a person who will look around for a rock if a hammer is not available uses the construct concerning "things to hammer with" in a permeable fashion.

On the other hand, flourescent-incandescent is relatively impermeable: It can be used for lighting, but little else is likely to ever be admitted. And people who won’t let you sit on tables are keeping their sit-upon constructs quite impermeable.

In case this seems like another way of talking about incidental vs. comprehensive constructs, note that you can have comprehensive but impermeable constructs, such as the one expressed by the person who says "Whatever happened to the good old days? There just don’t seem to be any honest people around anymore." In other words, honesty, though broad, is now closed. And there are incidental constructs used permeably, such as when you say "my, but you’re looking incandescent today!" Permeability is the very soul of poetry!

When there is no more "stretch," no more "give" in the range of the constructs you are using, you may have to resort to more drastic measures. Dilation is when you broaden the range of your constructs. Let’s say you don’t believe in ESP. You walk into a party and suddenly you hear a voice in your head and notice someone smiling knowingly at you from across the room! You would have to rather quickly stretch the range of the constructs involving ESP, which had been filled, up to now, with nothing but a few hoaxes.
On the other hand, sometimes events force you to narrow the range of your constructs equally dramatically. This is called constriction. An example might be when, after a lifetime of believing that people were moral creatures, you experience the realities of war. The construct including "moral" may shrink out of existence.

Notice that dilation and constriction are rather emotional things. You can easily understand depression and manic states this way. The manic person has dilated a set of constructs about his or her happiness enormously, and shouts "I've never imagined that life could be like this before!" Someone who is depressed, on the other hand, has taken the constructs that relate to life and good things to do with it and constricted them down to sitting alone in the dark.

**The choice corollary**

"A person chooses for himself that alternative in a dichotomized construct through which he anticipates the greater possibility for extension and definition of his system."

With all these constructs, and all these poles, how do we chose our behaviors? Kelly says that we will choose to do what we anticipate will most likely elaborate our construction system, that is, improve our understanding, our ability to anticipate. Reality places limits on what we can experience or do, but we choose how to construe, or interpret, that reality. And we choose to interpret that reality in whatever way we believe will help us the most.

Commonly, our choices are between an adventurous alternative and a safe one. We could try to extend our understanding of, say, human heterosexual interaction (partying) by making the adventurous choice of going to more parties, getting to know more people, developing more relationships, and so on.

On the other hand, we might prefer to define our understanding by making the security choice: staying home, pondering what might have gone wrong with that last unsuccessful relationship, or getting to know one person better. Which one you choose will depend on which one you think you need.

With all this choosing going on, you might expect that Kelly has had something to say about free will vs. determinism. He has, and what he has to say is very interesting: He sees freedom as being a relative concept. We are not "free" or "unfree;" Some of us are free-er than others; We are free-er in some situations than in others; We are free-er from some forces than from others; And we are free-er under some constructions than under others.

**The individuality corollary**

"Persons differ from each other in their construction of events."

Since everyone has different experiences, everyone’s construction of reality is different. Remember, he calls his theory the theory of personal constructs. Kelly does not approve of
classification systems, personality types, or personality tests. His own famous "rep test," as you will see, is not a test in the traditional sense at all.

**The commonality corollary**

"To the extent that one person employs a construction of experience which is similar to that employed by another, his psychological processes are similar to the other person."

Just because we are all different doesn't mean we can't be similar. If our construction system -- our understanding of reality -- is similar, so will be our experiences, our behaviors, and our feelings. For example, if we share the same culture, we'll see things in a similar way, and the closer we are, the more similar we'll be.

In fact, Kelly says that we spend a great deal of our time seeking **validation** from other people. A man sitting himself down at the local bar and sighing "women!" does so with the expectation that his neighbor at the bar will respond with the support of his world view he is at that moment desperately in need of: "Yeah, women! You can't live with 'em and you can't live without 'em." The same scenario applies, with appropriate alterations, to women. And similar scenarios apply as well to kindergarten children, adolescent gangs, the klan, political parties, scientific conferences, and so on. We look for support from those who are similar to ourselves. Only they can know how we truly feel!

**The fragmentation corollary**

"A person may successively employ a variety of construction subsystems which are inferentially incompatible with each other."

The **fragmentation corollary** says that we can be inconsistent within ourselves. It is, in fact, a rare person who "has it all together" and functions, at all times in all places, as a unified personality. Nearly all of us, for example, have different roles that we play in life: I am a man, a husband, a father, a son, a professor; I am someone with certain ethnic, religious, political, and philosophical identifications; sometimes I’m a patient, or a guest, or a host, or a customer. And I am not quite the same in these various roles.

Often the roles are separated by circumstances. A man might be a cop at night, and act tough, authoritarian, efficient. But in the daytime, he might be a father, and act gentle, tender, affectionate. Since the circumstances are kept apart, the roles don't come into conflict. But heaven forbid the man finds himself in the situation of having to arrest his own child! Or a parent may be seen treating a child like an adult one minute, scolding her the next, and hugging her like a baby the following minute. An observer might frown at the inconsistency. Yet, for most people, these inconsistencies are integrated at higher levels: The parent may be in each case expressing his or her love and concern for the child’s well-being.

Some of Kelly's followers have reintroduced an old idea to the study of personality, that each of us is a **community of selves**, rather than just one simple self. This may be true.
However, other theorists would suggest that a more unified personality might be healthier, and a "community of selves" is a little too close to multiple personalities for comfort!

**The sociality corollary**

"To the extent that one person construes the construction processes of another, he may play a role in a social process involving the other person."

Even if you are not really similar to another person, you can still relate to them. You can, in fact, "construe how another construes," "psych him out," "get inside her head," "see where he's coming from," and "know what she means." In other words, I can set aside a portion of myself (made possible through the fragmentation corollary) to "be" someone else.

This is an important part of role playing, because, whenever you play a role, you play it to or with someone, someone you need to understand in order to relate to. Kelly thought this was so important he almost called his theory role theory, except that the name had already been taken. These ideas, in fact, came from the school of thought in sociology founded by George Herbert Mead.

**Feelings**

The theory so far presented may sound very cognitive, with all its emphasis on constructs and constructions, and many people have said so as their primary criticism of Kelly's theory. In fact, Kelly disliked being called a cognitive theorist. He felt that his "professional constructs" included the more traditional ideas of perception, behavior, and emotion, as well as cognition. So to say he doesn't talk about emotions, for example, is to miss the point altogether.

What you and I would call emotions (or affect, or feelings) Kelly called constructs of transition, because they refer to the experiences we have when we move from one way of looking at the world or ourselves to another.

When you are suddenly aware that your constructs aren't functioning well, you feel anxiety. You are (as Kelly said) "caught with your constructs down." It can be anything from your checkbook not balancing, to forgetting someone's name during introductions, to an unexpected hallucinogenic trip, to forgetting your own name. When anticipations fail, you feel anxiety. If you've taken a social psychology course, you might recognize the concept as being very similar to cognitive dissonance.

When the anxiety involves anticipations of great changes coming to your core constructs -- the ones of greatest importance to you -- it becomes a threat. For example, you are not feeling well. You think it might be something serious. You go to the doctor. He looks. He shakes his head. He looks again. He gets solemn. He calls in a colleague.... This is "threat." We also feel it when we graduate, get married, become parents for the first time, when roller coasters leave the track, and during therapy.
When you do things that are not in keeping with your core constructs -- with your idea of who you are and how you should behave -- you feel **guilt**. This is a novel and useful definition of guilt, because it includes situations that people know to be guilt-ridden and yet don't meet the usual criterion of being in some way immoral. If your child falls into a manhole, it may not be your fault, but you will feel guilty, because it violates your belief that it is your duty as a parent to prevent accidents like this. Similarly, children often feel guilty when a parent gets sick, or when parents divorce. And when a criminal does something out of character, something the rest of the world might consider good, he feels guilty about it!

We have talked a lot about adapting to the world when our constructs don’t match up with reality, but there is another way: You can try to make reality match up with your constructs. Kelly calls this **aggression**. It includes aggression proper: If someone insults my tie, I can punch his lights out, in which case I can wear my tie in peace. But it also includes things we might today prefer to call assertiveness: Sometimes things are not as they should be, and we should change them to fit our ideals. Without assertiveness, there would be no social progress!

Again, when our core constructs are on the line, aggression may become **hostility**. Hostility is a matter of insisting that your constructs are valid, despite overwhelming evidence to the contrary. Examples might include an elderly boxer still claiming to be "the greatest," a nerd who truly believes he’s a Don Juan, or a person in therapy who desperately resists acknowledging that there even is a problem.

**Psychopathology and Therapy**

This brings us nicely to Kelly's definition of a **psychological disorder**: "Any personal construction which is used repeatedly in spite of consistent invalidation." The behaviors and thoughts of neurosis, depression, paranoia, schizophrenia, etc., are all examples. So are patterns of violence, bigotry, criminality, greed, addiction, and so on. The person can no longer anticipate well, yet can’t seem to learn new ways of relating to the world. He or she is loaded with anxiety and hostility, is unhappy and is making everyone else unhappy, too.

If a person’s problem is poor construction, then the solution should be **reconstruction**, a term Kelly was tempted to use for his style of therapy. Psychotherapy involves getting the client to reconstrue, to see things in a different way, from a new perspective, one that allows the choices that lead to elaboration.

Kellian therapists essentially ask their clients to join them in a series of **experiments** concerning the clients' life styles. They may ask their clients to loosen their constructs, to slip them around, to test them, to tighten them up again, to "try them on for size." The intent is to encourage **movement**, essential for any progress.

Kelly, with his background in drama, liked to use **role-playing** (or enactment) to encourage movement. He might take the part of your mother and have you express your
feelings. After a while, he might ask you to reverse roles with him -- you be your mother, and he'll be you! In this way, you become aware of your own construction of your relationship and your mother's construction. Perhaps you will begin to understand her, or see ways in which you might adapt. You may come to a compromise, or discover an entirely new perspective that rises above both.

Kelly's therapy often involves home-work, things he would ask you to do outside the therapy situation. His best known technique is called fixed-role therapy. First, he asks you for a description of yourself, a couple of pages in the third person, which he calls the character sketch. Then he constructs, perhaps with the help of a colleague, another description, called the fixed-role sketch, of a pretend person.

He writes this sketch by examining your original sketch carefully and using constructs that are "at right angles" to the constructs you used. This means that the new constructs are independent of the original ones, but they are used in a similar way, that is, they refer to the same range of elements.

If, for example, I use genius-idiot as a construct in dealing with people, I don't give them a lot of room to be somewhere in between, and I don't allow much for change. And, since we use the same constructs on ourselves as we use for others, I don't give myself much slack either. On a really good day, I might call myself a genius. On most days, I'd have no choice, if I used such a dramatic construct, but to call myself an idiot. And idiots stay idiots; they don't turn into geniuses. So, I'd be setting myself up for depression, not to mention for a life with very few friends.

Kelly might write a fixed-role sketch with a construct like skilled-unskilled. This is a much more "humane" construct than genius-idiot. It is much less judgmental: A person can, after all, be skilled in one area, yet unskilled in another. And it allows for change: If I find that I am unskilled in some area of importance, I can, with a little effort, become skilled.

Anyway, Kelly would then ask his client to be the person described in the fixed-role sketch for a week or two. Mind you, this is a full time commitment: He wants you to be this person 24 hours a day, at work, at home, even when you're alone. Kelly found that most people are quite good at this, and even enjoy it. After all, this person is usually much healthier than they are!

Should the client come back and say "Thank you, doc! I believe I'm cured. All I need to do now is be "Dave" instead of "George" for the rest of my life," Kelly would have a surprise in store: He might ask that person to play another fixed-role for a couple of weeks, one that might not be so positive. That's because the intent of this play-acting is not that the therapist give you a new personality. That would quickly come to nothing. The idea is to show you that you do, in fact, have the power to change, to "choose yourself."

Kellian therapy has, as its goal, opening people up to alternatives, helping them to discover their freedom, allowing them to live up to their potentials. For this reason, and many others, Kelly fits most appropriately among the humanistic psychologists.
Assessment

Perhaps the thing most associated with George Kelly is his **role construct repertory test**, which most people now call the **rep grid**. Not a test in the traditional sense at all, it is a diagnostic, self-discovery, and research tool that has actually become more famous than the rest of his theory.

![Rep Grid Diagram](image-url)

First, the client names a set of ten to twenty people, called **elements**, likely to be of some importance to the person’s life. In therapy, these people are named in response to certain suggestive categories, such as "past lover" and "someone you pity," and would naturally include yourself, your mother and father, and so on.

The therapist or researcher then picks out three of these at a time, and asks you to tell him or her which of the three are similar, and which one is different. And he asks you to give him something to call the similarity and the difference. The similarity label is called the **similarity pole**, and the difference one is called the **contrast pole**, and together they make up one of the constructs you use in social relations. If, for example, you say that you and your present lover are both nervous people, but your former lover was very calm, then nervous is the similarity pole and calm the contrast pole of the construct nervous-calm.

You continue in this fashion, with different combinations of three, until you get about twenty contrasts listed. By eyeballing the list, or by performing certain statistical operations on a completed chart, the list might be narrowed down to ten or so contrasts by eliminating overlaps: Often, our constructs, even though they have different words attached to them, are used in the same way. Nervous-calm, for example, may be used exactly like you use neurotic-healthy or jittery-passive.
In diagnosis and self-discovery uses, you are, of course, encouraged to use constructs that refer to people's behaviors and personalities. But in research uses, you may be asked to give any kind of constructs at all, and you may be asked to give them in response to all sorts of elements. In industrial psychology, for example, people have been asked to compare and contrast various products (for marketing analyses), good and bad examples of a product (for quality control analyses), or different leadership styles. You can find your musical style constructs this way, or your constructs about political figures, or the constructs you use to understand personality theories.

In therapy, the rep grid gives the therapist and the client a picture of the client's view of reality that can be discussed and worked with. In marriage therapy, two people can work on the grid with the same set of elements, and their constructs compared and discussed. It isn't sacred: The rep grid is rare among "tests" in that the client is invited to change his or her mind about it at any time. Neither is it assumed to be a complete picture of a person's mental state. It is what it is: a diagnostic tool.

In research, we can take advantage of a number of computer programs that allow for a "measurement" of the distances between constructs or between elements. We get a picture, created by the people themselves, of their world-views. We can compare the views of several people (as long as they use the same elements). We can compare a person's world-view before and after training, or therapy. It is an exciting tool, an unusual combination of the subjective and objective side of personality research.

Discussion

Kelly published The Psychology of Personal Constructs in 1955. After a brief flurry of interest (and considerable criticism), he and his theory were pretty much forgotten, except by a few loyal students, most of whom were involved more in their clinical practices than in the advancement of the psychology of personality. Curiously, his theory continued to have a modest notoriety in England, particularly among industrial psychologists.

The reasons for this lack of attention are not hard to fathom: The "science" branch of psychology was at that time still rather mired in a behaviorist approach to psychology that had little patience with the subjective side of things; And the clinical side of psychology found people like Carl Rogers much easier to follow. Kelly was a good 20 years ahead of his time. Only recently, with the so-called "cognitive revolution," are people really ready to understand him.

It is ironic that George Kelly, always true to his philosophy of constructive alternativism, felt that, if his theory were still around in ten or twenty years, in a form significantly like the original, there would be cause for concern. Theories, like our individual views of reality, should change, not remain static.

There are legitimate criticisms. First, although Kelly is a very good writer, he chose to reinvent psychology from the ground up, introducing a new set of terms and a new set of
metaphors and images. And he went out of his way to avoid being associated with other approaches to the field. This inevitably alienated him from the mainstream.

In a more positive vein, some of the words he invented are now firmly fixed in mainstream psychology (although many still think of them as "trendy!"): Anticipation has been made popular by the famous cognitive psychologist Ulric Neisser; Construct, construction, construal, and all its variations can be found in books and articles right alongside of words like perception and behavior. Sadly, Kelly, just like other innovators, seldom gets any credit for his innovations, mostly because psychologists are rarely trained to pay much attention to where ideas come from.

The "rep grid" has also become quite popular, especially since computers have made it much easier to use. As I mentioned before, it is a nice blend of the qualitative and the introspective that even critics of Kelly's overall theory have a hard time finding fault with.

**Connections**

Much of Personal Construct Theory is phenomenological. Kelly acknowledged his sympathies with the phenomenological theories of Carl Rogers, Donald Snygg and Arthur Combs, and the "self-theorists" Prescott Lecky and Victor Raimy. But he was skeptical of phenomenology per se. Like so many people, he assumed that phenomenology was some kind of introspective idealism. As we shall see in later chapters, that is a mistaken assumption.

But a phenomenologist would find much of Kelly's theory quite congenial. For example, Kelly believes that to understand behavior you need to understand how the person construes reality -- i.e. how he or she understands it, perceives it -- more than what that reality truly is. In fact, he points out that everyone's view -- even the hard-core scientist's -- is just that: a view. And yet he also notes, emphatically, that there is no danger here of solipsism (the idea that the world is only my idea), because the view has to be of something. This is exactly the meaning of the phenomenologist's basic principle, known as intentionality.

On the other hand, there are aspects of Kelly's theory that are not so congenial to phenomenology. First, he was a true theory-builder, and the technical detail of his theory shows it. Phenomenologists, on the other hand, tend to avoid theory. Second, he had high hopes for a rigorous methodology for psychology -- even using the experimental scientist as his "fruitful metaphor." Most phenomenologists are much more skeptical about experimentation.

The emphasis on theory-building, fine detail, and the hope for a rigorous methodology do make Kelly very appealing to modern cognitive psychologists. Time will tell whether Kelly will be remembered as a phenomenologist or a cognitivist!
Trait and Type Approaches

Trait theory

In psychology, Trait theory is a major approach to the study of human personality. Trait theorists are primarily interested in the measurement of traits, which can be defined as habitual patterns of behavior, thought, and emotion. According to this perspective, traits are relatively stable over time, differ across individuals (e.g., some people are outgoing whereas others are shy), and influence behavior.

Gordon Allport was an early pioneer in the study of traits, which he sometimes referred to as dispositions. In his approach, central traits are basic to an individual's personality, whereas secondary traits are more peripheral. Common traits are those recognized within a culture and may vary between cultures. Cardinal traits are those by which an individual may be strongly recognized. Since Allport's time, trait theorists have focused more on group statistics than on single individuals. Allport called these two emphases "nomothetic" and "idiographic," respectively.

There is a nearly unlimited number of potential traits that could be used to describe personality. The statistical technique of factor analysis, however, has demonstrated that particular clusters of traits reliably correlate together. Hans Eysenck has suggested that personality is reducible to three major traits. Other researchers argue that more factors are needed to adequately describe human personality. Many psychologists currently believe that five factors are sufficient.

Virtually all trait models, and even ancient Greek philosophy, include extraversion vs. introversion as a central dimension of human personality. Another prominent trait that is found in nearly all models is Neuroticism, or emotional instability.

Two taxonomies

Eysenck's three factor model contains the traits of extroversion, neuroticism, and psychoticism. The five factor model contains openness, extroversion, neuroticism, agreeableness, and conscientiousness. These traits are the highest-level factors of a hierarchical taxonomy based on the statistical technique of factor analysis. This method produces factors that are continuous, bipolar, can be distinguished from temporary states, and can describe individual differences.

Both approaches extensively use self-report questionnaires. The factors are intended to be orthogonal (uncorrelated) though there are often small positive correlations between factors. The five factor model in particular has been criticized for losing the orthogonal structure between factors. Hans Eysenck has argued that fewer factors are superior to a larger number of partly related ones. Although these two approaches are comparable because of the use of factor analysis to construct hierarchical taxonomies, they differ in the organization and number of factors.
Whatever the causes, however, psychoticism marks the two approaches apart, as the five factor model contains no such trait. Moreover, psychoticism, unlike any of the other factors in either approach, does not fit a normal distribution curve. Indeed, scores are rarely high, thus skewing a normal distribution. However, when they are high, there is considerable overlap with psychiatric conditions such as antisocial and schizoid personality disorders. Similarly, high scorers on neuroticism are more susceptible to sleep and psychosomatic disorders. Five factor approaches can also predict future mental disorders.

**Lower order factors**

![Lower order factors diagram](image)

Similarities between lower order factors for psychoticism and the factors of openness, agreeableness, and conscientiousness (from Matthews, Deary & Whiteman, 2003)

There are two higher-order factors that both taxonomies clearly share: extraversion and neuroticism. Both approaches broadly accept that extraversion is associated with sociability and positive affect, whereas neuroticism is associated with emotional instability and negative affect.

Many lower-order factors are similar between the two taxonomies. For instance, both approaches contain factors for sociability/gregariousness, for activity levels, and for assertiveness within the higher order factor extraversion. However, there are differences too. First, the three-factor approach contains nine lower-order factors and the five-factor approach has six.
Eysenck’s psychoticism factor incorporates some of the polar opposites of the lower order factors of openness, agreeableness and conscientiousness. A high scorer on tough-mindedness in psychoticism would score low on tender-mindedness in agreeableness. Most of the differences between the taxonomies stem from the three factor model’s emphasis on fewer high-order factors.

Causality

Although both major trait models are descriptive, only the three-factor model offers a detailed causal explanation. Eysenck suggests that different personality traits are caused by the properties of the brain, which themselves are the result of genetic factors. In particular, the three-factor model identifies the reticular system and the limbic system in the brain as key components that mediate cortical arousal and emotional responses respectively. Eysenck advocates that extraverts have low levels of cortical arousal and introverts have high levels, leading extraverts to seek out more stimulation from socializing and being venturesome. Moreover, Eysenck surmised that there would be an optimal level of arousal, after which inhibition would occur and that this would be different for each person.

In a similar vein, the three-factor approach theorizes that neuroticism is mediated by levels of arousal in the limbic system and that individual differences arise because of variable activation thresholds between people. Therefore, highly neurotic people when presented with minor stressors, will exceed this threshold, whereas people low in neuroticism will not exceed normal activation levels, even when presented with large stressors. By contrast, proponents of the five-factor approach assume a role of genetics and environment but offer no explicit causal explanation.

Given this emphasis on biology in the three-factor approach, it would be expected that the third trait, psychoticism, would have a similar explanation. However, the causal properties of this state are not well defined. Eysenck has suggested that psychoticism is related to testosterone levels and is an inverse function of the serotoninergic system, but he later revised this, linking it instead to the dopaminergic system.

List of personality traits

Personality Traits The Big Five personality traits The "Big Five" also referred to as the "Five-Factor Model" are five broad factors (dimensions) of personality, that are based upon empirical research. A mnemonic device to remember them is the acronym "OCEAN" or "CANOE". Two of the tests to measure the Big Five are the "Big Five Inventory" and the IPIP (International Personality Item Pool) an abbreviated form is the "IPIP-NEO". The BFI and the IPIP-NEO are available free online for noncommercial purposes.

Big Five:

1. **Openness to Experience/Intellect** - Composed of two related but separable traits, Openness to Experience and Intellect. Behavioral aspects include having wide
interests, and being imaginative and insightful, correlated with activity in the dorsolateral prefrontal cortex. Considered primarily a cognitive trait.

2. **Conscientiousness** - Scrupulous, meticulous, principled behavior guided or conforming to one’s own conscience. Associated with the dorsolateral prefrontal cortex. Anorexics are noted to have higher levels of conscientiousness.

3. **Extroversion** - Gregarious, outgoing, sociable, projecting one’s personality outward. The opposite of extroversion is introversion. Extroversion has shown to share certain genetic markers with substance abuse. Extroversion is associated with various regions of the prefrontal cortex and the amygdala.

4. **Agreeableness** - Refers to a compliant, trusting, empathic, sympathetic, friendly and cooperative nature.

5. **Neuroticism** - "Refers to an individual’s tendency to become upset or emotional" (Hans Eysenck) "Neuroticism is the major factor of personality pathology" (Eysenck & Eysenck, 1969). Neuroticism has been linked to serotonin transporter (5-HTT) binding sites in the thalamus: as well as activity in the insular cortex.

**Self-esteem (low)** - A "favorable or unfavorable attitude toward the self" (Rosenberg, 1965). An individual's sense of his or her value or worth, or the extent to which a person values, approves of, appreciates, prizes, or likes him or herself" (Blascovich & Tomaka, 1991).

**Harm avoidance** - A tendency towards shyness, being fearful and uncertain, tendency to worry. Neonatal complications such as preterm birth have been shown to affect harm avoidance. Those with BED, AN, and BN exhibit high levels of harm avoidance. The volume of the left amygdala in girls was correlated to levels of HA, in separate studies HA was correlated with reduced grey matter volume in the orbito-frontal, occipital and parietal regions.

**Novelty seeking** - Impulsive, exploratory, fickle, excitable, quick-tempered, and extravagant. Associated with addictive behavior.

**Perfectionism** - "I don’t think needing to be perfect is in any way adaptive" (Paul Hewitt, PhD)

**Socially prescribed perfectionism** – "believing that others will value you only if you are perfect."

**Self-oriented perfectionism** – "an internally motivated desire to be perfect."

Perfectionism is one of the traits associated with obsessional behavior and like obsessionality is also believed to be regulated by the basal ganglia.
Alexithymia - The inability to express emotions. "To have no words for one’s inner experience" (Rený J. Muller PhD). In studies done with stroke patients, alexithymia was found to be more prevalent in those who developed lesions in the right hemisphere following a cerebral infarction. There is a positive association with post-traumatic stress disorder (PTSD), childhood abuse and neglect and alexithymia. Utilizing psychometric testing and fMRI, studies showed positive response in the insula, posterior cingulate cortex (PCC), and thalamus.

Rigidity - Inflexibility, difficulty making transitions, adherence to set patterns. Mental rigidity arises out of a deficit of the executive functions. Originally termed frontal lobe syndrome it is also referred to as dysexecutive syndrome and usually occurs as a result of damage to the frontal lobe. This may be due to physical damage, disease (such as Huntington’s disease) or a hypoxic or anoxic insult.

Impulsivity - Risk taking, lack of planning, and making up one’s mind quickly (Eysenck and Eysenck). A component of disinhibition. Abnormal patterns of impulsivity have been linked to lesions in the right inferior frontal gyrus and in studies done by Antonio Damasio author of Descartes Error, damage to the ventromedial prefrontal cortex has been shown to cause a defect in real-life decision making in individuals with otherwise normal intellect. Those who sustain this type of damage are oblivious to the future consequences of their actions and live in the here and now.

Disinhibition - Behavioral dis-inhibition is an inability or unwillingness to constrain impulses, it is a key component of executive functioning. Researchers have emphasized poor behavioral inhibition as the central impairment of ADHD. It may be symptomatic of orbitofrontal lobe syndrome, a subtype of frontal lobe syndrome which may be an acquired disorder as a result of traumatic brain injury, hypoxic ischemic encephalopathy (HIE), anoxic encephalopathy, degenerative diseases such as Parkinson’s, bacterial or viral infections such as Lyme disease and neurosyphilis. Disinhibition has been consistently associated with substance abuse disorders, obesity, higher BMI, excessive eating, an increased rate of eating, and perceived hunger.

Obsessionality - Persistent, often unwelcome, and frequently disturbing ideas, thoughts, images or emotions, rumination, often inducing an anxious state. Obsessionality may result as a dysfunction of the basal ganglia.
Gordon Willard Allport (November 11, 1897 – October 9, 1967) was an American psychologist. Allport was one of the first psychologists to focus on the study of the personality, and is often referred to as one of the founding figures of personality psychology. He contributed to the formation of Values Scales and rejected both a psychoanalytic approach to personality, which he thought often went too deep, and a behavioral approach, which he thought often did not go deep enough. He emphasized the uniqueness of each individual, and the importance of the present context, as opposed to past history, for understanding the personality.

Allport had a profound and lasting influence on the field of psychology, even though his work is cited much less often than other well known figures. Part of his influence stemmed from his knack for attacking and broadly conceptualizing important and interesting topics (e.g. rumor, prejudice, religion, traits). Part of his influence was a result of the deep and lasting impression he made on his students during his long teaching career, many of whom went on to have important psychological careers. Among his many students were Jerome S. Bruner, Anthony Greenwald, Stanley Milgram, Leo Postman, Thomas Pettigrew, and M. Brewster Smith.

**Allport’s trait theory**

Allport is known as a "trait" psychologist. One of his early projects was to go through the dictionary and locate every term that he thought could describe a person. From this, he developed a list of 4500 trait like words. He organized these into three levels of traits. This is similar to Goldberg’s fundamental lexical hypothesis, or the hypothesis that over time,
humans develop widely used, generic terms for individual differences in their daily interactions.

**Allport’s three trait levels are:**

1. **Cardinal trait** - This is the trait that dominates and shapes a person's behavior. These are ruling passions/obsessions, such as a need for money, fame etc.

2. **Central trait** - This is a general characteristic found in some degree in every person. These are the basic building blocks that shape most of our behavior although they are not as overwhelming as cardinal traits. An example of a central trait would be honesty.

3. **Secondary trait** - These are characteristics seen only in certain circumstances (such as particular likes or dislikes that a very close friend may know). They must be included to provide a complete picture of human complexity.

**Genotypes and phenotypes**

Allport hypothesized the idea of internal and external forces that influence an individual’s behavior. He called these forces Genotypes and Phenotypes. Genotypes are internal forces relates to how a person retains information and uses it to interact with the external world. Phenotypes are external forces, these relate to the way an individual accepts his surroundings and how others influence their behavior. These forces generate the ways in which we behave and are the groundwork for the creation of individual traits.

**Functional autonomy of motives**

Allport was one of the first researchers to draw a distinction between Motive and Drive. He suggested that a drive formed as a reaction to a motive may outgrow the motive as a reason. The drive then is autonomous and distinct from the motive, whether it is instinct or any other. Allport gives the example of a man who seeks to perfect his task or craft. His reasons may be a sense of inferiority engrained in his childhood but his diligence in his work and the motive it acquires later on is a need to excel in his chosen profession. In the words of Allport, the theory "avoids the absurdity of regarding the energy of life now, in the present, as somehow consisting of early archaic forms (instincts, prepotent reflexes, or the never-changing Id). Learning brings new systems of interests into existence just as it does new abilities and skills. At each stage of development these interests are always contemporary; whatever drives, drives now." We also can see functional autonomy (the notion that motives can become independent of their origins) in the drive associated with making money to buy goods and services when it becomes an end in itself. Many obsessive and compulsive acts and thoughts might be manifestations of functional autonomy.
THE FUNCTIONAL AUTONOMY OF MOTIVES

Gordon W. Allport (1937)

First published in American Journal of Psychology, 50, 141-156.

For fifty years this JOURNAL has served both as a rich repository for research and as a remarkably sensitive record of the psychological temper of the times. These two services are of great historical value. Since there is no reason to doubt that The American Journal will continue to hold its position of leadership in the future, one wonders what new currents of psychological interest its pages will reflect in the coming half-century. With what problems will psychologists be chiefly concerned? What discoveries will they make? What types of scientific formulation will they prefer?

To predict at least one of these trends accurately requires no clairvoyance. On all sides we see the rising tide of interest in problems of personality. Up to a few years ago the somewhat segregated field of clinical psychology alone was concerned; but now theoretical and experimental psychology are likewise deeply affected. As never before the traditional portrait of the "generalized human mind" is being tested against the living models from which it is derived. As compared with particular minds it is found to lack locus, self-consciousness, organic character, and reciprocal interpenetration of parts, all of which are essential to personality. Unless I am greatly mistaken the coming half-century will see many attempts to replace the abstract datum (mind-in-general) with the concrete datum (mind-in-particular), even at the peril of a revolutionary upset in the conception of psychology as science.

Some of the best known definitions of psychology formulated in the past fifty years have given explicit recognition to the individuality of mind -- that is, to its dependence upon the person. But these definitions have not as yet noticeably affected the abstractive tendency of psychological research -- not even that of their authors. Wundt, James, and Titchener serve as examples. The first wrote: "It [psychology] investigates the total content of experience in its relations to the subject." The second: "Psychology is the science of finite individual minds;" and the third: [p. 142] "Psychology is the study of experience considered as dependent on some person." None of these authors developed his account of mental life to accord with his definition. It is as though some vague sense of propriety guided them in framing their definitions; they knew that mind (as a psychological datum) exists only in finite and in personal forms. Yet their historical positions -- the spirit of the times in which they worked -- prevented them from following their own definitions to the end. Had any one of them done so, the psychology of personality would have had early and illustrious sponsorship.

In line with what I regard as a certain development in the psychology of the future I venture to submit a paper dealing, I think, with the one issue that above all others divides the study of mind-in-general from the study of mind-in-particular. Motivation is the special theme, but the principle involved reaches into every nook and cranny of the evolving science of personality.
TWO KINDS OF DYNAMIC PSYCHOLOGY

Any type of psychology that treats motives, thereby endeavoring to answer the question as to why men behave as they do, is called a dynamic psychology. By its very nature it cannot be merely a descriptive psychology, content to depict the what and the how of human behavior. The boldness of dynamic psychology in striking for causes stands in marked contrast to the timid, "more scientific," view that seeks nothing else than the establishment of a mathematical function for the relation between some artificially simple stimulus and some equally artificial and simple response. If the psychology of personality is to be more than a matter of coefficients of correlation it too must be a dynamic psychology, and seek first and foremost a sound and adequate theory of the nature of human dispositions.

The type of dynamic psychology almost universally held, though sufficient from the point of view of the abstract motives of the generalized mind, fails to provide a foundation solid enough to bear the weight of any single full-bodied personality. The reason is that prevailing dynamic doctrines refer every mature motive of personality to underlying original instincts, wishes, or needs, shared by all men. Thus, the concert artist's devotion to his music is sometimes 'explained' as an extension of his self-assertive instinct, of the need for sentience, or as a symptom of some repressed striving of the libido. In McDougall's [p. 143] hormic psychology, for example, it is explicitly stated that only the instincts or propensities can be prime movers. Though capable of extension (on both the receptive and executive sides), they are always few in number, common in all men, and established at birth. The enthusiastic collector of bric-a-brac derives his enthusiasm from the parental instinct; so too does the kindly old philanthropist, as well as the mother of a brood. It does not matter how different these three interests may seem to be, they derive their energy from the same source. The principle is that a very few basic motives suffice for explaining the endless varieties of human interests. The psychoanalyst holds the same over-simplified theory. The number of human interests that he regards as so many cananalizations of the one basic sexual instinct is past computation.

The authors of this type of dynamic psychology are concerning themselves only with mind-in-general. They seek a classification of the common and basic motives by which to explain both normal or neurotic behavior of any individual case. (This is true even though they may regard their own list as heuristic or even as fictional.) The plan really does not work. The very fact that the lists are so different in their composition suggests -- what to a naive observer is plain enough -- that motives are almost infinitely varied among men, not only in form but in substance. Not four wishes, nor eighteen propensities, nor any and all combinations of these, even with their extensions and variations, seem adequate to account for the endless variety of goals sought by an endless variety of mortals. Paradoxically enough, in many personalities the few simplified needs or instincts alleged to be the common ground for all motivation, turn out to be completely lacking.

The second type of dynamic psychology, the one here defended, regards adult motives as infinitely varied, and as self-sustaining, contemporary systems, growing out of antecedent systems, but functionally independent of them. Just as a child gradually repudiates his
dependence on his parents, develops a will of his own, becomes self-active and self-determining, and outlives his parents, so it is with motives. Each motive has a definite point of origin which may possibly lie in instincts, or, more likely, in the organic tensions of infancy. Chronologically speaking, all adult purposes can be traced back to these seed-forms in infancy, but as the individual matures the tie is broken. Whatever bond remains, is historical, not functional.

Such a theory is obviously opposed to psychoanalysis and to all other genetic accounts that assume inflexibility in the root purposes and [p. 144] drives of life. (Freud says that the structure of the Id never changes!) The theory declines to admit that the energies of adult personality are infantile or archaic in nature. Motivation is always contemporary. The life of modern Athens is continuous with the life of the ancient city, but it in no sense depends upon its present "go." The life of a tree is continuous with that of its seed, but the seed no longer sustains and nourishes the full grown tree. Earlier purposes lead into later purposes, and are abandoned in their favor.

William James taught a curious doctrine that has been a matter for incredulous amusement ever since, the doctrine of the transitoriness of instincts. According to this theory -- not so quaint as sometimes thought -- an instinct appears but once in a lifetime, whereupon it promptly disappears through its transformation into habits. If there are instincts this is no doubt of their fate, for no instinct can retain its motivational force unimpaired after it has been absorbed and recast under the transforming influence of learning. Such is the reasoning of James, and such is the logic of functional autonomy. The psychology of personality must be a psychology of post-instinctive behavior.

Woodworth has spoken of the transformation of "mechanisms" into "drives." A mechanism Woodworth defines as any course of behavior that brings about an adjustment. A drive is any neural process that releases mechanisms especially concerned with consummatory reactions. In the course of learning, many preparatory mechanisms must be developed in order to lead to the consummation of an original purpose. These mechanisms are the effective cause of activity in each succeeding mechanism, furnishing the drive for each stage following in the series. Originally all these mechanisms were merely instrumental, only links in the long chain of processes involved in the achievement of an instinctive purpose; with time and development, with integration and elaboration, many of these mechanisms become activated directly, setting up a state of desire and tension for activities and objects no longer connected with the original impulse. Activities and objects that earlier in the game were means to an end, now become ends in themselves. [p. 145]

Although Woodworth's choice of quasi-neurological terminology is not the best, his doctrine, or one like it is indispensable in accounting for the infinite number of effective motives possible in human life, and for their severance from the rudimentary desires of infancy. Further discussion of the operation of the principle and a critique of Woodworth's position will be more to the point after a review of the evidence in favor of the principle.

**EVIDENCE FOR FUNCTIONAL AUTONOMY**
We begin in a common sense way. An ex-sailor has a craving for the sea, a musician longs to return to his instrument after an enforced absence, a city-dweller yearns for his native hills, and a miser continues to amass his useless horde. Now, the sailor may have first acquired his love for the sea as an incident in his struggle to earn a living. The sea was merely a conditioned stimulus associated with satisfaction of his 'nutritional craving.' But now the ex-sailor is perhaps a wealthy banker; the original motive is destroyed; and yet the hunger for the sea persists unabated, even increases in intensity as it becomes more remote from the 'nutritional segment.' The musician may first have been stung by a rebuke or by a slur on his inferior performances into mastering his instrument, but now he is safely beyond the power of these taunts; there is no need to compensate further; now he loves his instrument more than anything else in the world. Once indeed the city dweller may have associated the hills around his mountain home with nutritional and erotogenic satisfactions, but these satisfactions he now finds in his city home, not in the mountains; whence then comes all his hill-hunger? The miser perhaps learned his habits of thrift in dire necessity, or perhaps his thrift was a symptom of sexual perversion (as Freud would claim), and yet the miserliness persists, and even becomes stronger with the years, even after the necessity or the roots of the neurosis have been relieved.

Workmanship is a good example of functional autonomy. A good workman feels compelled to do clean-cut jobs even though his security, or the praise of others, no longer depends upon high standards. In fact, in a day of jerry-building his workman-like standards may be to his economic disadvantage. Even so he cannot do a slipshod job. Workmanship is not an instinct, but so firm is the hold it may acquire on [p. 146] a man that it is little wonder Veblen mistook it for one. A business man, long since secure economically, works himself into ill-health, and sometimes even back into poverty, for the sake of carrying on his plans. What was once an instrumental technique becomes a master-motive.

Neither necessity nor reason can make one contented permanently on a lonely island or on an island farm after one is adapted to active, energetic city life. The acquired habits seem sufficient to urge one to a frenzied existence, even though reason and health demand the simpler life.

The pursuit of literature, the development of good taste in clothes, the use of cosmetics, the acquiring of an automobile, strolls in the public park, or a winter in Miami -- all may first serve, let us say, the interests of sex. But every one of these instrumental activities may become an interest in itself, held for a life time, long after the erotic motive has been laid away in lavender. People often find that they have lost allegiance to their original aims because of their deliberate preference for the many ways of achieving them.

The maternal sentiment offers a final illustration. Many young mothers bear their children unwillingly, dismayed at the thought of the drudgery of the future. At first they may be indifferent to, or even hate, their offspring; the 'parental instinct' seems wholly lacking. The only motives that hold such a mother to child-tending may be fear of what her critical neighbors will say, fear of the law, a habit of doing any job well, or perhaps a dim hope that the child will provide security for her in her old age. However gross these motives, they are sufficient to hold her to her work, until through the practice of devotion her burden
becomes a joy. As her love for the child develops, her earlier practical motives are forgotten. In later years not one of these original motives may operate. The child may be incompetent, criminal, a disgrace to her, and far from serving as a staff for her declining years, he may continue to drain her resources and vitality. The neighbors may criticize her for indulging the child, the law may exonerate her from allegiance; she certainly feels no pride in such a child; yet she sticks to him. The tenacity of the maternal sentiment under such adversity is proverbial.

Such examples from everyday experience could be multiplied ad infinitum. The evidence, however, appears in sharper outline when it is taken from experimental and clinical studies. In each of the following instances some new function emerges as an independently structured [p. 147] unit from preceding functions. The activity of these new units does not depend upon the continued activity of the units from which they developed.

(1) **The circular reflex.** Everyone has observed the almost endless repetition of acts by a child. The good-natured parent who picks up a spoon repeatedly thrown down by a baby wearies of this occupation long before the infant does. Such repetitive behavior, found likewise in early vocalization (babbling), and in other early forms of play, is commonly ascribed to the mechanism of the circular reflex. It is an elementary instance of functional autonomy; for any situation where the consummation of an act provides adequate stimulation for the repetition of the same act does not require any backward tracing of motives. The act is self-perpetuating until it is inhibited by new activities or fatigue.

(2) **Conative perseveration.** Many experiments show that incompletely interrupted tasks set up tensions that tend to keep the individual at work until they are resolved. No hypothesis of self-assertion, rivalry, or any other basic need, is required. The completion of the task itself has become a quasi-need with dynamic force of its own. It has been shown, for example, that interrupted tasks are better remembered than completed tasks, that an individual interrupted in a task will, even in the face of considerable opposition return to that task, that even trivial tasks undertaken in a casual way become almost haunting in character until they are completed.

Conative perseveration of this order is stronger if an empty interval of time follows the period of work, showing that left to itself, without the inhibiting effect of other duties or activities, the motive grows stronger and stronger. The experiment of Kendig proves this point, as well as that of C.E. Smith. The latter investigator demonstrated that there is no more success in removing a conditioned fear if the de-conditioning process is commenced immediately. After a twenty-four hour delay the fear has become set, and is more difficult to eradicate. Hence the sound advice to drivers of automobiles or airplanes [p. 148] who have been involved in an accident, that they drive again immediately to conquer the shock of the accident, lest the fear become set into a permanent phobia. The rule seems to be that unless specifically inhibited all emotional shocks, given time to set, tend to take on a compulsive autonomous character.

(3) **Conditioned reflexes** not requiring reënforcement. The pure conditioned reflex readily dies out unless the secondary stimulus is occasionally reënforced by the primary stimulus.
The dog does not continue to salivate whenever it hears a bell unless sometimes at least an edible offering accompanies the bell. But there are innumerable instances in human life where a single association, never reënforced, results in the establishment of a life-long dynamic system. An experience associated only once with a bereavement, an accident, or a battle, may become the center of a permanent phobia or complex, not in the least dependent on a recurrence of the original shock.

(4) **Counterparts in animal behavior.** Though the validity of a principle in human psychology never depends upon its having a counterpart in animal psychology, still it is of interest to find functional autonomy in the lower organisms. For example, rats, who will first learn a certain habit only under the incentive of some specific tension, as hunger, will, after learning, often perform the habit even when fed to repletion.

Another experiment shows that rats trained to follow a long and difficult path, will for a time persist in using this path, even though a short easy path to the goal is offered and even after the easier path has been learned. Among rats as among human beings, old and useless habits have considerable power in their own right.

Olson studied the persistence of artificially induced scratching habits in rats. Collodion applied to the ears of the animal set up removing and cleaning movements. Four days later the application was repeated. From that time on the animals showed significantly greater number of cleaning movements than control animals. A month after the beginning of the experiment when the ears of the rats as studied by the microscope showed no further trace of irritation, the number of movements was still very great. Whether the induced habit spasm was permanently retained the experiment does not say. [p. 149]

(5) **Rhythm.** A rat whose activity bears a definite relation to his habits of feeding (being greatest just preceding a period of feeding and midway between two such periods) will, even when starved, display the same periodicity and activity. The acquired rhythm persists without dependence on the original periodic stimulation of feeding.

Even a mollusc whose habits of burrowing in the sand and reappearing depend upon the movements of the tide, will, when removed from the beach to the laboratory, continue for several days in the same rhythm without the tide. Likewise certain animals, with nocturnal rhythms advantageous in avoiding enemies, obtaining food, or preventing excessive evaporation from the body, may exhibit such rhythms even when kept in a laboratory with constant conditions of illumination, humidity, and temperature.

There are likewise instances where acquired rhythms in human life have taken on a dynamic character. Compulsive neurotics enter upon fugues or debauches, apparently not because of specific stimulation, but because "the time has come." A dipsomaniac, in confinement and deprived for months of his alcohol, describes the fierceness of the recurrent appetite (obviously acquired) as follows.

Those craving paroxysms occur at regular intervals, three weeks apart, lasting for several days. They are not weak, nambypamby things for scoffers to laugh at. If not assuaged with
liquor they become spells of physical and mental illness. My mouth drools saliva, my stomach and intestines seem cramped, and I become bilious, nauseated, and in a shaky nervous funk.

In such states of drug addiction, as likewise in states of hunger, lust, fatigue, there is to be sure a physical craving, but the rhythms of the craving are partially acquired, and are always accentuated by the mental habits associated with it. For instance, eating in our civilized way of life takes place not because physical hunger normally occurs three times a day, but because of habitual rhythms of expectancy. The habit of smoking is much more than a matter of craving for the specific narcotic effects of tobacco; it is a craving for the motor ritual and periodic distraction as well.

(6) **Neuroses.** Why are acquired tics, stammering, sexual perversions, phobias, and anxiety so stubborn and so often incurable? Even psychoanalysis, with its deepest of depth-probing, seldom succeeds in [p. 150] effecting complete cures in such cases, even though the patient may feel relieved or at least reconciled to his difficulties after treatment. The reason seems to be that what are usually called 'symptoms' are in reality something more. They have set themselves up in their own right as independent systems of motivation. Merely disclosing their roots does not change their independent activity.

(7) **The relation between ability and interest.** Psychometric studies have shown that the relation between ability and interest is always positive, often markedly so. A person likes to do what he can do well. Over and over again it has been demonstrated that the skill learned for some external reason, turns into an interest, and is self-propelling, even though the original reason for pursuing it has been lost. A student who at first undertakes a field of study in college because it is prescribed, because it pleases his parents, or because it comes at a convenient hour, often ends by finding himself absorbed, perhaps for life, in the subject itself. He is not happy without it. The original motives are entirely lost. What was a means to an end has become an end in itself.

Furthermore, there is the case of genius. A skill takes possession of the man. No primitive motivation is needed to account for his persistent, absorbed activity. It just is the alpha and omega of life to him. It is impossible to think of Pasteur's concern for health, food, sleep, or family, as the root of his devotion to his work. For long periods of time he was oblivious of them all, losing himself in the white heat of research for which he had been trained and in which he had acquired a compelling and absorbing interest.

A much more modest instance is the finding of industrial research that when special incentives are offered and work speeded up as a consequence, and then these special incentives removed, the work continues at the speeded rate. The habit of working at a faster tempo persists without external support.

(8) **Sentiments vs. instincts.** Every time an alleged instinct can by rigid analysis be demonstrated not to be innate but acquired, there is in this demonstration evidence for functional autonomy. It is true enough that maternal conduct, gregariousness, curiosity, workman- [p. 151] ship, and the like, have the tenacity and compelling power that instincts
are supposed to have. If they are not instincts, then they must be autonomous sentiments with as much dynamic character as has been attributed to instincts. It is not necessary here to review all the arguments in favor of regarding such alleged instincts as acquired sentiments.

(9) The dynamic character of personal values. When an interest-system has once been formed it not only creates a tensional condition that may be readily aroused, leading to overt conduct in some way satisfying to the interest, but it also acts as a silent agent for selecting and directing any behavior related to it. Take the case of people with strongly marked esthetic interests. Experiments with the word-association test have shown that such people respond more quickly to stimulus-words connected with this interest than to words relating to interests they lack. Likewise, in scanning a newspaper they will observe and remember more items pertaining to art; they also take a greater interest in clothes than do non-esthetic people; and when they are asked to rate the virtues of others, they place esthetic qualities high. In short the existence of a well-established acquired interest exerts a directive and determining effect on conduct just as is to be expected of any dynamic system. The evidence can be duplicated for many interests other than the esthetic.

CRITIQUE OF FUNCTIONAL AUTONOMY

Objections to the principle of autonomy may be expected from two sides. Behaviorists will continue to prefer their conception of organic drive with its capacity for manifold conditioning by ever receding stimuli. Whereas purposivists will be unwilling to accept a pluralistic principle that seems to leave motives so largely at the mercy of learning.

The behaviorist is well satisfied with motivation in terms of organic drive and conditioning because he feels that he somehow has secure anchorage in physiological structure (The closer he approaches physiological structure the happier the behaviorist is.) But the truth of the matter is that the neural physiology of organic drive and conditioning is no better established, and no easier to imagine, than is the neural physiology of the type of complex autonomous units of motivation here described. [p. 152]

Two behavioristic principles will be said to account adequately for the instances of functional autonomy previously cited, viz., the circular reflex and cross-conditioning. The former concept, acceptable enough when applied to infant behavior, merely says that the more activity a muscle engages in, the more activity of the same sort does it engender through a self-sustaining circuit. This is, to be sure, a clear instance of autonomy, albeit on a primitive level, oversimplified so far as adult conduct is concerned. The doctrine of cross-conditioning refers to subtle recession of stimuli, and to the intricate possibility of cross-connections in conditioning. For instance, such ubiquitous external stimuli as humidity, daylight, gravitation, may feed collaterally into open channels of activity, arousing mysteriously and unexpectedly a form of conduct to which they have unconsciously been conditioned. For example, the angler whose fishing expeditions have been accompanied by sun, wind, or a balmy June day, may feel a desire to go fishing whenever the barometer, the thermometer, or the calendar in his city home tells him that these conditions prevail.
Innumerable such crossed stimuli are said to account for the arousal of earlier patterns of activity.

Such a theory inherits, first of all, the well-known difficulties resident in the principle of conditioning whenever it is made the sole explanation of human behavior. Further, though the reflex circle and cross-conditioning may in fact exist, they are really rather trivial principles. They leave the formation of interest and its occasional arousal almost entirely to chance factors of stimulation. They give no picture at all of the spontaneous and variable aspects of traits, interests, or sentiments. These dispositions are regarded as purely reactive in nature; the stimulus is all-important. The truth is that dispositions sort out stimuli congenial to them, and this activity does not in the least resemble the rigidity of reflex response.

A variant on the doctrine of cross-conditioning is the principle of redintegration. This concept admits the existence of highly integrated dispositions of a neuropsychic order. These dispositions can be aroused as a whole by any stimulus previously associated with their [p. 153] functioning. In this theory likewise, the disposition is regarded as a rather passive affair, waiting for reactivation by some portion of the original stimulus. Here again the variability of the disposition and its urge-like quality are not accounted for. The stimulus is thought merely to reinstate a complex determining tendency. Nothing is said about how the stimuli themselves are selected, why a motive once aroused becomes insistent, surmounting obstacles, skillfully subordinating conflicting impulses, and inhibiting irrelevant trains of thought.

In certain respects the principle of autonomy stands midway between the behavioristic view and the thoroughgoing purposive psychology of the hormic order. It agrees with the former in emphasizing the acquisition of motives, in avoiding an a priori and unchanging set of original urges, and in recognizing (as limited principles) the operation of the circular response and cross-conditioning. It agrees with the hormic psychologist, however, in finding that striving-from-within is a far more essential characteristic of motive than stimulation-from-without. It agrees likewise in distrusting the emphasis upon stomach contractions and other "excess and deficit stimuli" as "causes" of mature behavior. Such segmental sources of energy even when conditioned cannot possibly account for the "go" of conduct. But functional autonomy does not rely as does hormic theory upon modified instinct, which after all is as archaic a principle as the conditioning of autonomic segmental tensions, but upon the capacity of human beings to replenish their energy through a plurality of constantly changing systems of a dynamic order.

The hormic psychologist, however, will not accept the autonomy of new motivational systems. If mechanisms can turn into drives, he asks, why is it that habits and skills as they become exercised to the point of perfection do not acquire an ever increasing driving force? The mechanisms of walking, speaking, or dressing, cannot be said to furnish their own motive-power. One walks, speaks, or dresses in order to satisfy a motive entirely external to these learned skills.
The criticism is sufficiently cogent to call into question Woodworth’s form of stating the principle, viz., "mechanisms may become drives." It is not an adequate statement of the case.

Looking at this issue more closely it seems to be neither the perfected [p. 154] talent nor the automatic habit that has driving power, but the imperfect talent and the habit-in-the-making. The child who is just learning to speak, to walk, or to dress is, in fact, likely to engage in these activities for their own sake, precisely as does the adult who has an unfinished task in hand. He remembers it, returns it, and suffers a feeling of frustration if he is prevented from engaging in it. Motives are always a kind of striving for some form of completion; they are unresolved tension, and demand a "closure" to activity under way. (Latent motives are dispositions that are easily thrown by a stimulus or by a train of associations into this state of active tension.) The active motive subsides when its goal is reached, or in the case of a motor skill, when it has become at last automatic. The novice in automobile driving has an unquestionable impulse to master the skill. Once acquired the ability sinks to the level of an instrumental disposition and is aroused only in the service of some other driving (unfulfilled) motive.

Now, in the case of the permanent interests of personality, the situation is the same. A man whose motive is to acquire learning, or to perfect his craft, can never be satisfied that he has reached the end of his quest, for his problems are never completely solved, his skill is never perfect. Lasting interests are recurrent sources of discontent, and from their incompleteness they derive their forward impetus. Art, science, religion, love, are never perfected. Motor skills, however, are often perfected, and beyond that stage they seldom provide their own motive power. It is, then, only mechanisms on-the-make (in process of perfecting) that serve as drives. With this emendation, Woodworth’s view is corrected, and McDougall’s objection is met.

**IMPLICATIONS OF FUNCTIONAL AUTONOMY**

The principle of functional autonomy accounts, as no other principle of dynamic psychology is able to do, for the concrete impulses that lie at the root of personal behavior. It is thus the first step in establishing a basis for the more realistic study of unique and individual forms for personality. "But how --" the traditionalists may cry, "how are we ever to have a science of unique events? Science must generalize." So it must, but it is a manifest error to assume that a general principle of motivation must involve the postulation of abstract or general motives. What the objectors forget is that a general law may be a law that tells [p. 155] how uniqueness comes about. The principle of functional autonomy is general enough to meet the needs of science, but particularized enough in its operation to account for the uniqueness of personal conduct. Its specific advantages stand out in the following summary.

(1) It clears the way for a completely dynamic psychology of traits, attitudes, interests, and sentiments, which can now be regarded as the ultimate and true dispositions of the mature personality.
(2) It avoids the absurdity of regarding the energy of life now, in the present, as somehow consisting of early archaic forms (instincts, prepotent reflexes, or the never-changing Id). Learning brings new systems of interests into existence just as it does new abilities and skills. At each stage of development these interests are always contemporary; whatever drives, drives now.

(3) It dethrones the stimulus. A motive is no longer regarded as a mechanical reflex or as a matter of redintegration, depending entirely upon the capricious operation of a conditioned stimulus. In a very real sense dispositions selected the stimuli to which they respond, even though some stimulus is required for their arousal.

(4) It readily admits the validity of all other established principles of growth. Functional autonomy recognizes the products of differentiation, integration, maturation, exercise, imitation, suggestion, conditioning, trauma, and all other processes of development; and allows, as they do not, considered by themselves, for the preservation of these products in significant motivational patterns.

(5) It places in proper perspective the problems of the origin of conduct by removing the fetish of the genetic method. Not that the historical view of behavior is unimportant for a complete understanding of personality, but so far as motives are concerned the cross-sectional dynamic analysis is more significant. Motives being always contemporary should be studied in their present structure. Failure to do so is probably the chief reason why psychoanalysis meets so many defeats, as do all other therapeutic schemes relying too exclusively upon uncovering the motives of early childhood.

(6) It accounts for the force of delusions, shell-shock, phobias, and all manner of compulsive and maladaptive behavior. One would expect such unrealistic modes of adjustment to be given up as they are shown to be poor ways of confronting the environment. Insight and the law of effect should both remove them -- but too often they have acquired a strangle hold in their own right. [p. 156]

(7) At last we can account adequately for socialized and civilized behavior. The principle supplies the correction necessary to the faulty logic of bellum omnium contra omnes. Starting life, as a completely selfish being, the child would indeed remain entirely wolffish and piggish throughout his days unless genuine transformations of motives took place. Motives being completely alterable, the dogma of Egoism turns out to be a callow and superficial philosophy of behavior, or else a useless redundancy.

(8) It explains likewise why a person often becomes what at first he merely pretends to be - - the smiling professional hostess who grows fond of her once irksome rôle and is unhappy when deprived of it; the man who for so long has counterfeited the appearance of self-confidence and optimism that he is always driven to assume it; the prisoner who comes to love his shackles. Such personae, as Jung observes, are often transformed into the real self. The mask becomes the anima.
(9) The drive behind genius is explained. Gifted people demand the exercise of their talents, even when no other reward lies ahead. In lesser degree the various hobbies, the artistic, or the intellectual interests of any person show the same significant autonomy.

(10) In brief, the principle of functional autonomy is a declaration of independence for the psychology of personality. Though in itself a general law, at the same time it helps to account, not for the abstract motivation of an impersonal and therefore non-existent mind-in-general, but for the concrete, viable motives of each and every mind-in-particular.

GORDON ALLPORT: Summarized

1897 - 1967

Dr. C. George Boeree

Gordon Allport was born in Montezuma, Indiana, in 1897, the youngest of four brothers. A shy and studious boy, he was teased quite a bit and lived a fairly isolated childhood. His father was a country doctor, which meant that Gordon grew up with his father’s patients and nurses and all the paraphernalia of a miniature hospital. Everyone worked hard. His early life was otherwise fairly pleasant and uneventful.

One of Allport’s stories is always mentioned in his biographies: When he was 22, he traveled to Vienna. He had arranged to meet with the great Sigmund Freud! When he arrived in Freud’s office, Freud simply sat and waited for Gordon to begin. After a little bit, Gordon could no longer stand the silence, and he blurted out an observation he had made on his way to meet Freud. He mentioned that he had seen a little boy on the bus who was very upset at having to sit where a dirty old man had sat previously. Gordon thought this was likely something he had learned from his mother, a very neat and apparently rather domineering type. Freud, instead of taking it as a simple observation, took it to be an expression of some deep, unconscious process in Gordon’s mind, and said “And was that little boy you?”

This experience made him realize that depth psychology sometimes digs too deeply, in the same way that he had earlier realized that behaviorism often doesn’t dig deeply enough!

Allport received his Ph.D. in Psychology in 1922 from Harvard, following in the foot steps of his brother Floyd, who became an important social psychologist. His career was spent developing his theory, examining such social issues as prejudice, and developing personality tests. He died in Cambridge Massachusetts in 1967.
Theory

One thing that motivates human beings is the tendency to satisfy biological survival needs, which Allport referred to as **opportunistic functioning**. He noted that opportunistic functioning can be characterized as reactive, past-oriented, and, of course, biological.

But Allport felt that opportunistic functioning was relatively unimportant for understanding most of human behavior. Most human behavior, he believed, is motivated by something very different -- functioning in a manner expressive of the self -- which he called **propriate functioning**. Most of what we do in life is a matter of being who we are! Propriate functioning can be characterized as proactive, future-oriented, and psychological.

Propriate comes from the word **proprium**, which is Allport's name for that essential concept, the self. He had reviewed hundreds of definitions for that concept and came to feel that, in order to more scientific, it would be necessary to dispense with the common word self and substitute something else. For better or worse, the word proprium never caught on.

To get an intuitive feel for what propriate functioning means, think of the last time you wanted to do something or become something because you really felt that doing or becoming that something would be expressive of the things about yourself that you believe to be most important. Remember the last time you did something to express your self, the last time you told yourself, "that's really me!" Doing things in keeping with what you really are, that's propriate functioning.

The proprium

Putting so much emphasis on the self or proprium, Allport wanted to define it as carefully as possible. He came at that task from two directions, phenomenologically and functionally.

First, phenomenologically, i.e. the self as experienced: He suggested that the self is composed of the aspects of your experiencing that you see as most **essential** (as opposed to incidental or accidental), **warm** (or “precious,” as opposed to emotionally cool), and **central** (as opposed to peripheral).

His functional definition became a developmental theory all by itself. The self has seven functions, which tend to arise at certain times of one’s life:

1. Sense of body
2. Self-identity
3. Self-esteem
4. Self-extension
5. Self-image
6. Rational coping
7. Propriate striving

**Sense of body** develops in the first two years of life. We have one, we feel its closeness, its warmth. It has boundaries that pain and injury, touch and movement, make us aware of. Allport had a favorite demonstration of this aspect of self: Imagine spitting saliva into a cup -- and then drinking it down! What’s the problem? It’s the same stuff you swallow all day long! But, of course, it has gone out from your bodily self and become, thereby, foreign to you.

**Self-identity** also develops in the first two years. There comes a point were we recognize ourselves as continuing, as having a past, present, and future. We see ourselves as individual entities, separate and different from others. We even have a name! Will you be the same person when you wake up tomorrow? Of course -- we take that continuity for granted.

**Self-esteem** develops between two and four years old. There also comes a time when we recognize that we have value, to others and to ourselves. This is especially tied to a continuing development of our competencies. This, for Allport, is what the “anal” stage is really all about!

**Self-extension** develops between four and six. Certain things, people, and events around us also come to be thought of as central and warm, essential to my existence. “My” is very close to “me!” Some people define themselves in terms of their parents, spouse, or children, their clan, gang, community, college, or nation. Some find their identity in activities: I’m a psychologist, a student, a bricklayer. Some find identity in a place: my house, my hometown. When my child does something wrong, why do I feel guilty? If someone scratches my car, why do I feel like they just punches me?

**Self-image** also develops between four and six. This is the “looking-glass self,” the me as others see me. This is the impression I make on others, my “look,” my social esteem or status, including my sexual identity. It is the beginning of what others call conscience, ideal self, and persona.

**Rational coping** is learned predominantly in the years from six till twelve. The child begins to develop his or her abilities to deal with life’s problems rationally and effectively. This is analogous to Erikson’s “industry.”

**Propriate striving** doesn’t usually begin till after twelve years old. This is my self as goals, ideal, plans, vocations, callings, a sense of direction, a sense of purpose. The culmination of propriate striving, according to Allport, is the ability to say that I am the proprietor of my life -- i.e. the owner and operator!

(One can’t help but notice the time periods Allport uses -- they are very close to the time periods of Freud’s stages! But please understand that Allport’s scheme is **not** a stage theory -- just a description of the usual way people develop.)
Traits or dispositions

Now, as the proprium is developing in this way, we are also developing personal traits, or personal dispositions. Allport originally used the word traits, but found that so many people assumed he meant traits as perceived by someone looking at another person or measured by personality tests, rather than as unique, individual characteristics within a person, that he changed it to dispositions.

A personal disposition is defined as “a generalized neuropsychic structure (peculiar to the individual), with the capacity to render many stimuli functionally equivalent, and to initiate and guide consistent (equivalent) forms of adaptive and stylistic behavior.”

A personal disposition produces equivalences in function and meaning between various perceptions, beliefs, feelings, and actions that are not necessarily equivalent in the natural world, or in anyone else’s mind. A person with the personal disposition “fear of communism” may equate Russians, liberals, professors, strikers, social activists, environmentalists, feminists, and so on. He may lump them all together and respond to any of them with a set of behaviors that express his fear: making speeches, writing letters, voting, arming himself, getting angry, etc.

Another way to put it is to say that dispositions are concrete, easily recognized, consistencies in our behaviors.

Allport believes that traits are essentially unique to each individual: One person’s “fear of communism” isn’t the same as another’s. And you can’t really expect that knowledge of other people is going to help you understand any one particular person. For this reason, Allport strongly pushed what he called idiographic methods -- methods that focused on studying one person at a time, such as interviews, observation, analysis of letters or diaries, and so on. These are nowadays generally referred to as qualitative methods.

Allport does recognize that within any particular culture, there are common traits or dispositions, ones that are a part of that culture, that everyone in that culture recognizes and names. In our culture, we commonly differentiate between introverts and extraverts or liberals and conservatives, and we all know (roughly) what we mean. But another culture may not recognize these. What, for example, would liberal and conservative mean in the middle ages?

Allport recognizes that some traits are more closely tied to the proprium (one’s self) than others. Central traits are the building blocks of your personality. When you describe someone, you are likely to use words that refer to these central traits: smart, dumb, wild, shy, sneaky, dopey, grumpy... He noted that most people have somewhere between five and ten of these.

There are also secondary traits, ones that aren’t quite so obvious, or so general, or so consistent. Preferences, attitudes, situational traits are all secondary. For example, “he
gets angry when you try to tickle him,” “she has some very unusual sexual preferences,” and “you can’t take him to restaurants.”

But then there are **cardinal traits**. These are the traits that some people have which practically define their life. Someone who spends their life seeking fame, or fortune, or sex is such a person. Often we use specific historical people to name these cardinal traits: Scrooge (greed), Joan of Arc (heroic self-sacrifice), Mother Teresa (religious service), Marquis de Sade (sadism), Machiavelli (political ruthlessness), and so on. Relatively few people develop a cardinal trait: If they do, it tends to be late in life.

**Psychological maturity**

If you have a well-developed proprium and a rich, adaptive set of dispositions, you have attained psychological maturity, Allport's term for mental health. He lists seven characteristics:

1. Specific, enduring **extensions of self**, i.e. involvement.
2. Dependable techniques for **warm relating** to others (e.g. trust, empathy, genuineness, tolerance...).
3. **Emotional security** and self-acceptance.
4. Habits of **realistic perception** (as opposed to defensiveness).
5. **Problem-centeredness**, and the development of problem-solving skills.
6. **Self-objectification** -- insight into one’s own behavior, the ability to laugh at oneself, etc.
7. A unifying **philosophy of life**, including a particular value orientation, differentiated religious sentiment, and a personalized conscience.

**Functional autonomy**

Allport didn’t believe in looking too much into a person’s past in order to understand his present. This belief is most strongly evident in the concept of **functional autonomy**: Your motives today are independent (autonomous) of their origins. It doesn’t matter, for example, why you wanted to become a doctor, or why you developed a taste for olives or for kinky sex, the fact is that this is the way you are now!

Functional autonomy comes in two flavors: The first is **perseverative functional autonomy**. This refers essentially to habits -- behaviors that no longer serve their original purpose, but still continue. You may have started smoking as a symbol of adolescent rebellion, for example, but now you smoke because you can’t quit! Social rituals such as saying “bless you” when someone sneezes had a reason once upon a time (during the plague, a sneeze was a far more serious symptom than it is today!), but now continues because it is seen as polite.

**Propriate functional autonomy** is something a bit more self-directed than habits. Values are the usual example. Perhaps you were punished for being selfish when you were a child. That doesn’t in any way detract from your well-known generosity today -- it has become your value!
Perhaps you can see how the idea of functional autonomy may have derived from Allport’s frustration with Freud (or the behaviorists). Of course, that hardly means that it’s only a defensive belief on Allport’s part!

The idea of proprie functional autonomy -- values -- lead Allport and his associates Vernon and Lindzey to develop a categorization of values (in a book called *A Study of Values*, 1960) and a test of values.

1. the *theoretical* -- a scientist, for example, values truth.
2. the *economic* -- a businessperson may value usefulness.
3. the *aesthetic* -- an artist naturally values beauty.
4. the *social* -- a nurse may have a strong love of people.
5. the *political* -- a politician may value power.
6. the *religious* -- a monk or nun probably values unity.

Most of us, of course, have several of these values at more moderate levels, plus we may value one or two of these quite negatively. There are modern tests used for helping kids find their careers that have very similar dimensions.

**Conclusions**

Allport is one of those theorists who was so right about so many things that his ideas have simply passed on into the spirit of the times. His theory is one of the first humanistic theories, and would influence many others, including Kelly, Maslow, and Rogers. One unfortunate aspect of his theory is his original use of the word trait, which brought down the wrath of a number of situationally oriented behaviorists who would have been much more open to his theory if they had bothered to understand it. But that has always been a weakness of psychology in general and personality in particular: Ignorance of the past and the theories and research of others.

**Raymond Cattell**

Raymond Bernard Cattell (20 March 1905 – 2 February 1998) was a British and American psychologist, known for his exploration of many areas in psychology. These areas included: the basic dimensions of personality and temperament, a range of cognitive abilities, the dynamic dimensions of motivation and emotion, the clinical dimensions of personality,
patterns of group and social behavior, applications of personality research to psychotherapy and learning theory, predictors of creativity and achievement, and many scientific research methods for exploring and measuring these areas. Cattell was famously productive throughout his 92 years, authoring and co-authoring over 50 books and 500 articles, and over 30 standardized tests. According to a widely cited ranking, he was the 16th most influential and eminent psychologist of the 20th century.

As a psychologist, Cattell was rigorously devoted to the scientific method. He was an early proponent of using factor analytical methods instead of what he called "verbal theorizing" to explore the basic dimensions of personality, motivation, and cognitive abilities. One of the most important results of Cattell's application of factor analysis was his discovery of 16 factors underlying human personality. He called these factors "source traits" because he believed they provide the underlying source for the surface behaviors we think of as personality. This theory of personality factors and the instrument used to measure them are known respectively as the 16 personality factor model and the 16PF Questionnaire.

Although Cattell is best known for identifying the dimensions of personality, he also studied basic dimensions of other domains: intelligence, motivation, and vocational interests. Cattell theorized the existence of fluid and crystallized intelligences to explain human cognitive ability, and authored the Culture Fair Intelligence Test to minimize the bias of written language and cultural background in intelligence testing.

**Innovations and accomplishments**

Cattell's principal accomplishments were in personality, intelligence, and statistics. In personality, he is best remembered for his 16-factor model of personality, arguing for this over Eysenck's simpler 3-factor model, and developing tests to measure his primary factors in the form of the 16PF Questionnaire. He was the first to propose a hierarchical, multi-level model of personality with basic primary factors at the first level and the broader, "second-order," or global traits of personality at a higher level of personality organization (Cattell, 1943). These five global traits are now identified with the widely used Big Five model of personality. His research lead to additional conceptual advances - for instance distinguishing state versus trait measurement of personality: immediate, transitory states versus long-term, enduring trait levels on traits such as anxiety. In intelligence, Cattell is best identified with the distinction of fluid and crystallized intelligence: current, abstract, adaptive intellectual abilities versus applied or crystallized knowledge. As a theoretical underpinning for this distinction, Cattell developed the investment-model of ability, arguing that crystallized ability emerged out of investment of fluid ability in a topic of knowledge. He thus contributed to cognitive epidemiology, arguing that crystallized knowledge, while initially lagging fluid ability, could be maintained or even increase after fluid ability began to decline, a concept embodied in the National Adult Reading Test (NART). Cattell developed his own ability test, the Culture Fair Intelligence Scales, designed to minimize the effect of cultural or educational background and provide a completely non-verbal measure of intelligence such as that now seen in the Raven's.
In statistics, he founded the Society of Multivariate Experimental Psychology (1960) and its journal Multivariate Behavioral Research. He was a early and frequent user of factor analysis, and developed improvements for this process, such as the Scree Test which used the curve of latent roots to judge the best number of factors to result from a factor analysis. He also developed a new factor analysis rotation, the "Procrustes" rotation, designed to test the fit of data to a prior-hypothesized factor structure. Additional contributions include the Coefficient of Profile Similarity (taking account of shape, scatter, and level of two score profiles), the Dynamic Calculus for assessing interests and motivation, P-technique factor analysis for an occasion-by-variable matrix, the Taxonome program for ascertaining the number and contents of clusters in a data set, the Basic Data Relations Box (assessing the dimensions of experimental designs), sampling of variables, as opposed to or in conjunction with sampling of persons; the group syntality construct: the "personality" of a group; factoring or repeated measures on single individuals to study fluctuating personality states, and Multiple Abstract Variance Analysis (MAVA) with "specification equations" embodying genetic and environmental variables and their interactions.

**Multivariate research**

Rather than pursue a “univariate” research approach to psychology, studying the effect that a single variable (such as “dominance”) might have on one other variable (such as “decision-making”), Cattell pioneered the use of a multivariate approach to psychology. He believed that behavioral dimensions were too complex and interactive to fully understand one dimension in isolation. The classical univariate approach required bringing the individual into an artificial laboratory situation and measuring the effect of one particular variable on another, while the multivariate approach allowed psychologists to study the whole person and their unique combination of traits in a natural environment. Multivariate analyses allowed for the study of real-world situations (e.g. depression, divorce, loss) that could not be manipulated in a laboratory.

Cattell applied multivariate research to three domains: the traits of personality or temperament, the motivational or dynamic traits, and the diverse dimensions of abilities. In each of these areas, he thought there must be a finite number of basic, unitary elements that could be identified. He drew a comparison between these fundamental, underlying traits to the basic elements of the physical world that were discovered and presented in the periodic table of the elements.

In 1960, he organized an international meeting of research-oriented psychologists, resulting in the founding of the Society for Multivariate Experimental Psychology, and its journal, Multivariate Behavioral Research. He brought many researchers from Europe, Asia, Africa, Australia, and South America to work at his lab at the University of Illinois. Many of his books were written in collaboration with others.

**Factor analysis**

Cattell noted that in sciences such as chemistry, physics, astronomy, and medicine, unsubstantiated theories were historically widespread until new instruments were
developed to improve scientific observation and measurement. In the 1920s, Cattell studied under Charles Spearman who was developing the new psychometric technique of factor analysis in his effort to understand the basic dimensions and structure of human abilities. Factor analysis became a powerful tool to help uncover the basic dimensions behind a confusing array of surface variables in a particular domain.

Factor analysis was built upon the earlier development of the correlation coefficient, which measures the degree to which two variables are related or tend to go together. For example, if "frequency of exercise" and "blood pressure level" were measured on a large group of people, then inter-correlating these two variables would indicate the degree to which "exercise" and "blood pressure" are directly related to each other. Factor analysis performs complex calculations on the correlation coefficients among a multitude of variables in a particular domain (such as abilities or personality) to determine the basic, unitary factors at work behind the superficial variables of behavior found in that domain.

While working at the University of London with Spearman exploring the number and nature of human abilities, Cattell postulated that factor analysis could be applied to other areas beyond the domain of abilities. In particular, Cattell was interested in exploring the basic dimensions and structure of human personality. For example, he thought that if factor analysis were applied to a wide range of measures of interpersonal functioning, the basic dimensions within the domain of social behavior could be identified. Thus, factor analysis could be used to discover the fundamental dimensions behind the large number of apparent surface behaviors and then facilitate more effective research in this area.

**Personality theory**

In order to apply factor analysis to personality, Cattell believed it necessary to sample the widest possible range of variables. He specified three kinds of data for comprehensive sampling, to capture the full range of personality dimensions:

- **Life data (or L-data)**, which involves collecting data from the individual's natural, everyday life behaviors, measuring their characteristic behavior patterns in the real world. This could range from number of traffic accidents or number of parties attended each month, to grade point average in school or number of illnesses or divorces.

- **Experimental data (or T-data)** which involves reactions to standardized experimental situations created in a lab where a subject's behavior can be objectively observed and measured.

- **Questionnaire data (or Q-data)**, which involves responses based on introspection by the individual about their own behavior and feelings. He found that this kind of direct questioning often measured subtle internal states and viewpoints that might be hard to see or measure in external behavior.

In order for a personality dimension to be called "fundamental and unitary,” Cattell believed that it needed to be found in factor analyses of data from all three of these
domains. Thus, Cattell constructed personality measures of a wide range of traits in each medium. He then repeatedly performed factor analyses on the data.

With the help of many colleagues, Cattell’s factor-analytic studies continued over several decades, eventually producing the 16 fundamental factors underlying human personality. He decided to name these traits with letters (A, B, C, D, E...) in order to avoid misnaming these newly discovered dimensions, or inviting confusion with existing vocabulary and concepts. Factor-analytic studies by many researchers in diverse cultures around the world have re-validated the number and meaning of these traits.

Cattell set about developing tests to measure these traits across different age ranges, such as The 16 Personality Factor Questionnaire for adults, the Adolescent Personality Questionnaire, and the Children’s Personality Questionnaire.

From the beginning of his research, Cattell reasoned that, as in other scientific domains like intelligence, there might be an additional, higher level of organization within personality which would provide a structure for the many primary traits. When he factor analyzed the 16 primary traits themselves, he found five “second-order” or global factors, now commonly known as the Big Five. These second-order or global traits were broad, overarching domains of behavior, which provided meaning and structure for the primary traits. For example, the global trait Extraversion emerged from factor-analytic results made up of the five primary traits that were interpersonal in focus.

Thus, global Extraversion is fundamentally related to the primary traits that came together in the factor analysis to define Extraversion, and, moving in the opposite direction, the domain of Extraversion gave conceptual meaning and structure to these primary traits, identifying their focus and function in personality. These two levels of personality structure can be used to provide an integrated understanding of the whole person, with the global traits giving an overview of the individual’s functioning in a broad-brush way, and the more-specific primary trait scores providing an in-depth, detailed picture of the individual’s unique trait combinations.

Research on the basic 16 traits has shown them to be useful in understanding and predicting a wide range of real life behaviors. For example, the traits have been used in educational settings to study and predict such things as achievement motivation, learning style or cognitive style, creativity, and compatible career choices; in work or employment settings to predict such things as leadership style, interpersonal skills, creativity, conscientiousness, stress-management, and accident-proneness; in medical settings to predict heart attack proneness, pain management variables, likely compliance with medical instructions, or recovery pattern from burns or organ transplants; in clinical settings to predict self-esteem, interpersonal needs, frustration tolerance, and openness to change; and, in research settings to predict a wide range of dimensions such as aggression, conformity, and authoritarianism.
Cattell’s program of personality research in the 1940s, 50’s, and 60’s resulted in five books that have been widely recognized as identifying fundamental dimensions of personality and their organizing principles:

1. The Description and Measurement of Personality (1946)
2. Personality: A Systematic, Theoretical, and Factual Study (1950)
3. Personality and Motivation Structure and Measurement (1957)
4. The Scientific Analysis of Personality (1965)
5. Personality and Mood by Questionnaire (1973)

These books detailed a program of research that was based on personality data from objective behavioral studies, from self-report or questionnaire data, and from observer ratings. They presented a theory of personality development over the human life span, including effects on the individual’s behavior from family, social, cultural, biological, and genetic influences, as well as influences from the domains of motivation and ability.

Criticism and the APA Lifetime Achievement Award

William H. Tucker and Barry Mehler, have taken issue with Cattell based on his interests in eugenics, evolution and political systems. They argue that throughout his life Cattell adhered to a mixture of eugenics and theology, which he eventually named Beyondism and proposed as "a new morality from science". Beyondism is based on the premise that groups, like individuals, evolve based on survival of the fittest. Cattell argues that a diversity of "raco-cultural" groups is necessary to allow that evolution. He makes controversial arguments to support natural group selection by encouraging not only the separation of groups but also the prevention of any "external" assistance to "failing" groups from "successful" ones, and by calling for a process of "genthanasia," in which the former would be "phased out" by the latter through "educational and birth control measures"--that is, by segregating them and preventing their reproduction. However, Cattell’s former colleagues and other supporters assert that, although some of Cattell’s views are controversial, Tucker and Mehler have exaggerated and misrepresented him by using quotes out of context and from outdated writings.

In 1997, Cattell, at 92, was chosen by the American Psychological Association (APA) for its "Gold Medal Award for Lifetime Achievement in the Science of Psychology." Before the medal was presented, Mehler launched a publicity campaign against Cattell through his nonprofit foundation ISAR accusing Cattell of being sympathetic to racist and fascist ideas and claiming that "it is unconscionable to honor this man whose work helps to dignify the most destructive political ideas of the twentieth century". A blue-ribbon committee was convened by the APA to investigate the legitimacy of the charges. However, before the committee reached a decision, Cattell issued an open letter to the committee saying "I abhor racism and discrimination based on race. Any other belief would be antithetical to my life’s work" and saying that "it is unfortunate that the APA announcement ... has brought misguided critics’ statements a great deal of publicity." He refused the award, withdrawing his name from consideration. The blue ribbon committee was therefore disbanded and Cattell, in failing health, died months later.
In 1994, Cattell was one of 52 signatories on "Mainstream Science on Intelligence," an editorial written by Linda Gottfredson and published in the Wall Street Journal, which declared the consensus of the signing scholars on issues related to race and intelligence following the publication of the book The Bell Curve.

16 Personality Factors

The 16 Personality Factors, measured by the 16PF Questionnaire, were derived using factor-analysis by psychologist Raymond Cattell.

Below is a table outlining this model.

**Raymond Cattell's 16 Personality Factors**

<table>
<thead>
<tr>
<th>Descriptors of Low Range</th>
<th>Primary Factor</th>
<th>Descriptors of High Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impersonal, distant, cool, reserved, detached, formal, aloof (Schizothymia)</td>
<td>Warmth (A)</td>
<td>Warm, outgoing, attentive to others, kindly, easy-going, participating, likes people (Affectothymia)</td>
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<tr>
<td>Concrete thinking, lower general mental capacity, less intelligent, unable to handle abstract problems (Lower Scholastic Mental Capacity)</td>
<td>Reasoning (B)</td>
<td>Abstract-thinking, more intelligent, bright, higher general mental capacity, fast learner (Higher Scholastic Mental Capacity)</td>
</tr>
<tr>
<td>Reactive emotionally, changeable, affected by feelings, emotionally less stable, easily upset (Lower Ego Strength)</td>
<td>Emotional Stability (C)</td>
<td>Emotionally stable, adaptive, mature, faces reality calmly (Higher Ego Strength)</td>
</tr>
<tr>
<td>Deferential, cooperative, avoids conflict, submissive, humble, obedient, easily led, docile, accommodating (Submissiveness)</td>
<td>Dominance (E)</td>
<td>Dominant, forceful, assertive, aggressive, competitive, stubborn, bossy (Dominance)</td>
</tr>
<tr>
<td>Serious, restrained, prudent, taciturn, introspective, silent (Desurgency)</td>
<td>Liveliness (F)</td>
<td>Lively, animated, spontaneous, enthusiastic, happy go lucky, cheerful, expressive, impulsive (Surgency)</td>
</tr>
<tr>
<td>Expedient, nonconforming, disregards rules, self-indulgent (Low Super Ego Strength)</td>
<td>Rule-Consciousness (G)</td>
<td>Rule-conscious, dutiful, conscientious, conforming, moralistic, staid, rule bound (High Super Ego Strength)</td>
</tr>
<tr>
<td>Shy, threat-sensitive, timid, hesitant, intimidated</td>
<td>Social Boldness (H)</td>
<td>Socially bold, venturesome, thick skinned, uninhibited</td>
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<tr>
<td>(Threctia)</td>
<td>(Parmia)</td>
<td></td>
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<td>----------------------------------------------------</td>
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<tr>
<td>Utilitarian, objective, unsentimental, tough minded, self-reliant, no-nonsense, rough (Harria)</td>
<td>Sensitivity</td>
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<td></td>
<td>(I)</td>
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<tr>
<td>Trusting, unsuspecting, accepting, unconditional, easy (Alaxia)</td>
<td>Vigilance</td>
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<td>(L)</td>
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<tr>
<td>Grounded, practical, prosaic, solution oriented, steady, conventional (Praxernia)</td>
<td>Abstractedness</td>
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<td>(M)</td>
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<tr>
<td>Forthright, genuine, artless, open, guileless, naive, unpretentious, involved (Artlessness)</td>
<td>Privateness</td>
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<td>(N)</td>
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<tr>
<td>Self-Assured, unworried, complacent, secure, free of guilt, confident, self satisfied (Untroubled)</td>
<td>Apprehension</td>
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<td></td>
<td>(O)</td>
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<tr>
<td>Traditional, attached to familiar, conservative, respecting traditional ideas (Conservatism)</td>
<td>Openness to Change</td>
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<td></td>
<td>(Q1)</td>
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<tr>
<td>Group-oriented, affiliative, a joiner and follower dependent (Group Adherence)</td>
<td>Self-Reliance</td>
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<td>(Q2)</td>
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<tr>
<td>Tolerates disorder, unexacting, flexible, undisciplined, lax, self-conflict, impulsive, careless of social rules, uncontrolled (Low Integration)</td>
<td>Perfectionism</td>
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<td>(Q3)</td>
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<tr>
<td>Relaxed, placid, tranquil, torpid, patient, composed low drive (Low Ergic Tension)</td>
<td>Tension</td>
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<td>(Q4)</td>
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Primary Factors and Descriptors in Cattell's 16 Personality Factor Model (Adapted From Conn & Rieke, 1994).

**Relationship to the Big Five**

Cattell referred to these 16 factors as primary factors. He factored these primary factors (i.e., performed a second-order factor analysis) and derived a smaller number of factors...
which he labeled global factors. In the Fifth Edition of the 16PF, there are five global factors that correspond fairly closely to the "Big Five" (BF). BF Openness => 16PF tough-mindedness (reversed); BF Conscientiousness => 16PF Self-Control; BF Extraversion => 16PF Extraversion; BF Agreeableness => 16PF Independence (reversed); and BF Neuroticism => 16PF Anxiety (Conn & Rieke, 1994). One technical difference between Cattell’s five global factors and popular five-factor models was Cattell’s insistence on using oblique rotations, whereas Goldberg and Costa & McCrae use orthogonal rotations. On a interpretive basis, Cattell’s model counts dominance (Factor E) as a facet of Independence (i.e., Agreeableness reversed) whereas other popular big five models consider dominance as a facet of Extraversion (Cattell & Mead, 2008).

Origins

In 1936 Gordon Allport and H.S. Odbert hypothesized that:
“Those individual differences that are most salient and socially relevant in people’s lives will eventually become encoded into their language; the more important such a difference, the more likely is it to become expressed as a single word.”

This statement has become known as the Lexical Hypothesis.

Allport and Odbert had worked through two of the most comprehensive dictionaries of the English language available at the time, and extracted 18,000 personality-describing words. From this gigantic list they extracted 4500 personality-describing adjectives which they considered to describe observable and relatively permanent traits.

In 1946 Raymond Cattell used the emerging technology of computers to analyse the Allport-Odbert list. He organized the list into 181 clusters and asked subjects to rate people whom they knew by the adjectives on the list. Using factor analysis Cattell generated twelve factors, and then included four factors which he thought ought to appear. The result was the hypothesis that individuals describe themselves and each other according to sixteen different, independent factors.

With these sixteen factors as a basis, Cattell went on to construct the 16PF Personality Questionnaire, which remains in use by universities and businesses for research personnel selection and the like. Although subsequent research has failed to replicate his results, and it has been shown that he retained too many factors, the current 16PF takes these findings into account and is considered to be a very good test. In 1963, W.T. Norman replicated Cattell’s work and suggested that five factors would be sufficient.

16PF Questionnaire

16 primary traits, Big Five, which have become popularized by other authors in recent years. From early in his research, Cattell found that the structure of personality was multi-level and hierarchical, with a structure of interdependent primary and secondary level traits (Cattell, 1946, 1957). The sixteen primary factors were a result of factor-analyzing
hundreds of measures of everyday behaviors to find the fundamental traits behind them. Then, they discovered the five global (or second-order) factors by factor-analyzing the sixteen primary traits themselves, to find the basic, organizing forces among the sixteen basic traits. Thus, the 16PF test gives scores on both the five second-order global traits which provide an overview of personality at a broader, conceptual level, as well as on the more-numerous and precise primary traits, which give a picture of the richness and complexity of each unique personality. A listing of these traits can be found in the article on the 16 Personality Factor Model. Cattell also found that there was a third-order level of personality organization that contained just two over-arching, top-level factors (Cattell, 1957), but little time has been spent on defining this most abstract level of personality organization.

The test is an integral part of Cattell’s comprehensive theory of individual differences. The tests 70 years of research have shown it to be useful in predicting behavior in a range of settings, and to provide an in-depth, integrated picture of the individual’s whole personality. For example, it is commonly used in schools and colleges, clinical and counseling settings, in career counseling and employee selection and development, as well as in basic personality research. Research has indicated that the test is useful in predicting a wide variety of behaviors, such as creativity, academic success, cognitive style, empathy and interpersonal skills, leadership potential, conscientiousness, self-esteem, frustration tolerance, coping patterns, marital compatibility, and job performance. The test has also been translated into over 35 languages and dialects, and is widely used internationally. However, Cattell’s findings have never been repeated by an independent research team. Reports of widespread use should be balanced with a concern for avoiding overinterpretation of personality questionnaire results, particularly in making major judgments of a tested person such as hiring.

Cattell and his co-workers also developed parallel personality questionnaires to measure traits in other age-ranges, such as the Adolescent Personality Questionnaire for ages 12 to 18 years. A shorter version, the 16PF Select Questionnaire, was developed for personnel settings. Cattell also developed non-verbal measures of ability, such as the three scales of the Culture-Fair Intelligence Test as well as tests of motivation.

Outline of Test

The most recent edition of the Sixteen Personality Factor Questionnaire (16PF), released in 1993, is the fifth edition of the original test. The test was first published in 1949; the second and third editions were published in 1956 and 1962, respectively; and the five alternative forms of the fourth edition were released between 1967 and 1969. The goal of the fifth edition revision was to update, improve, and simplify the language used in the test items; simplify the answer formats; develop new validity scales; improve the psychometric properties of the test, including new reliability and validity data; and to develop a new standardization sample (of 10,000 people) to reflect the current U.S. Census population.

The 16PF Fifth Edition contains 185 multiple-choice items which are written at a fifth-grade reading level. Of these items, 76% were from the four previous 16PF editions,
although many of them were re-written to simplify or update the language. The item content typically sounds non-threatening and asks simple questions about daily behavior, interests, and opinions. One particular characteristic of the 16PF Questionnaire is that its items tend to sample a broad range of actual behavior by asking questions about daily, concrete situations, rather than asking the test-taker to simply make a self-assessment of their own personality traits as some tests do (e.g. current popular tests include "I am a warm and friendly person; I am not a worrier; I am an even tempered person."). That type of simple, self-rating type question tends to be substantially related to the person’s own self-image, and dependent on the individual’s view of themselves, their level of self-awareness, and their defensiveness about their actual traits. Instead, most 16PF questions tend to ask about actual behavioral situations:

When I find myself in a boring situation, I usually "tune out" and daydream about other things. True/False.

When a bit of tact and convincing is needed to get people moving, I'm usually the one who does it. True/False.

The test provides scores on 16 primary personality scales and 5 global personality scales, all of which are bi-polar (both ends of each scale have a distinct, meaningful definition). The test also includes three validity scales: a bi-polar Impression Management (IM) scale, an Acquiescence (ACQ) scale, and an Infrequency (INF) scale. The reasoning ability (Factor B) items appear at the end of the test booklet with separate instructions, because they are the only items that have right and wrong answers.

Administration of the test takes about 35-50 minutes for the paper-and-pencil version and about 30 minutes by computer. The test instructions are simple and straightforward, and the test is un-timed, and thus it is generally self-administrable and can be used in either an individual or a group setting. The 16PF test was designed for adults at least age 16 and older, but there are also parallel tests for various younger age ranges (e.g., the 16PF Adolescent Personality Questionnaire).

The 16PF Questionnaire has been translated into more than 35 languages and dialects. Thus the test can be administered in different languages, scored based on either local, national, or international normative samples, and computerized interpretive reports provided in about 15 different languages. The test has generally been culturally adapted (rather than just translated) in these countries, with local standardization samples plus reliability and validity information collected locally and presented in individual manuals.

The test can be hand-scored using a set of scoring keys, or computer-scored by mailing-in or faxing-in the answer sheet to the Publisher IPAT™. There is also a software system that can be used to administer, score, and provide reports on the test results directly in the professional’s office; and an Internet-based system which can also provide administration, scoring, and reports at any Internet-enabled computer in a range of different languages. There are about a dozen computer-generated interpretive reports which can be used to help interpret the test for different purposes, for example, the Personal Career Development Profile, the Karson Clinical Report, The Couples Counseling Report, the
Human Resource Development Report, the Teamwork Development Report, and the Leadership Coaching Report. There are also many books that help with test interpretation, for example, 16PF Interpretation in Clinical Practice (Karson, Karson, & O’Dell, 1997), The 16PF: Personality in Depth (Cattell, H.B., 1989), or Essentials of the 16PF (Cattell, H.E. & Schuerger, J.M, 2003)

A shorter version of the test, the 16PF Select (Cattell, Cattell, Cattell & Kelly, 1999), was developed for use in time-sensitive, employee selection settings, and includes fewer items per scale than the regular test. The 16PF Express (Gorsuch, 2007) is a very short, 15-minute, version of the test which has about four items per factor and a wider answer format (items have a four-point or five-point answer format), which is used mainly for research. The 16PF traits are also included in the PsychEval Personality Questionnaire (PEPQ), which combines measures of both normal and abnormal personality traits into one test (Cattell, Cattell, Cattell, Russell, & Bedwell, 2003)

**History and development**

The 16PF Questionnaire was created from a fairly unique perspective among personality tests. Most personality tests are developed to measure just the pre-conceived traits that are of interest to a particular theorist or researcher. The main author of the 16PF, Raymond B. Cattell, had a strong background in the physical sciences, especially chemistry and physics, at a time when the basic elements of the physical world were being discovered, placed in the periodic table, and used as the basis for understanding the fundamental nature of the physical world and for further inquiry. From this background in the physical sciences, Cattell developed the belief that all fields are best understood by first seeking to find the fundamental underlying elements in that domain, and then developing a valid way to measure and research these elements (Cattell, 1965)

When Cattell moved from the physical sciences into the field of psychology in the 1920s, he described his disappointment about finding that it consisted largely of a wide array of abstract, unrelated theories and concepts that had little or no scientific bases. He found that most personality theories were based on philosophy and on personal conjecture, or were developed by medical professionals, such as Jean Charcot and Sigmund Freud, who relied on their personal intuition to reconstruct what they felt was going on inside people, based on observing individuals with serious psycho-pathological problems. Cattell (1957) described the concerns he felt as a scientist:

“In psychology there is an ocean of spawning intuitions and comfortable assumptions which we share with the layman, and out of which we climb with difficulty to the plateaus of scientific objectivity....Scientific advance hinges on the introduction of measurement to the field under investigation....Psychology has bypassed the necessary descriptive, taxonomic, and metric stages through which all healthy sciences first must pass....If Aristotle and other philosophers could get no further by sheer power of reasoning in two thousand years of observation, it is unlikely that we shall do so now.... For psychology to take its place as an effective science, we must become less concerned with grandiose theory than with establishing, through research, certain basic laws of relationship.” (p.3-5)
Thus, Cattell’s goal in creating the “16PF Questionnaire” was to discover the number and nature of the fundamental traits of human personality and to develop a way to measure these dimensions. At the University of London, Cattell worked with Charles Spearman who was developing factor analysis to aid in his quest to discover the basic factors of human ability. Cattell thought that could also be applied to the area of personality. He reasoned that human personality must have basic, underlying, universal dimensions just as the physical world had basic building blocks (like oxygen and hydrogen). He felt that if the basic building blocks of personality were discovered and measured, then human behavior (e.g., creativity, leadership, altruism, or aggression) could become increasingly understandable and predictable.

Cattell and his colleagues began a comprehensive program of international research aimed at identifying and mapping out the basic underlying dimensions of personality. Their goal was to systematically measure the widest possible range of personality concepts, in a belief that “all aspects of human personality which are or have been of importance, interest, or utility have already become recorded in the substance of language” (Cattell, R. B., 1943, p. 483). They wanted to include every known personality dimension in their investigation, and thus began with the largest existing compilation of personality traits (Allport and Odbert, 1936). Over time, they used factor analysis to reduce the massive list of traits by analyzing the underlying patterns among them. They studied personality data from different sources (e.g. objective measures of daily behavior, interpersonal ratings, and questionnaire results), and measured these traits in diverse populations, including working adults, university students, and military personnel. (Cattell, 1957, 1973).

Over several decades of factor-analytic study, Cattell and his colleagues gradually refined and validated their list of underlying source traits. The search resulted in the sixteen unitary traits of the 16PF Questionnaire. These traits have remained the same over the last 50 years of research. In addition, the 16PF Questionnaire traits are part of a multi-variate personality model that provides a broader framework including developmental, environmental, and hereditary patterns of the traits and how they change across the life span (Cattell, 1973, 1979, 1980).

The validity of the factor structure of the 16PF Questionnaire (the 16 primary factors and 5 global factors) has been supported by more than 60 published studies (Cattell & Krug, 1986; Conn & Rieke, 1994; Hofer and Eber, 2002). Research has also supported the comprehensiveness of the 16PF traits: all dimensions on other major personality tests (e.g., the NEO Personality Inventory, the California Psychological Inventory, the Personality Research Form, and the Myers-Briggs Type Indicator) have been found to be contained within the 16PF scales in regression and factor-analytic studies (Conn & Rieke, 1994; Cattell, 1996).

**The Original Big Five Traits**

From the beginning of his research, Cattell found personality traits to have a multi-level, hierarchical structure (Cattell, 1946). The first goal of these researchers was to find the
most fundamental primary traits of personality. Next they factor-analyzed these numerous primary traits to see if these traits had a structure of their own—i.e. if some of them naturally went together in self-defining, meaningful groupings.

They consistently found that the primary traits themselves came together in particular, meaningful groupings to form broader secondary or global traits, each with its own particular focus and function within personality (Cattell & Schuerger, 2003). For example, the first global trait they found was Extraversion-Introversion. It resulted from the natural affinity of five primary traits that defined different reasons for an individual to move toward versus away from other people (see below). They found that there was a natural tendency for these traits to go together in the real world, and to define an important domain of human behavior—social behavior. This global factor Global Extraversion/Introversion (the tendency to move toward versus away from interaction with others) is composed from the following primary traits:

1. **Warmth (Factor A):** the tendency to move toward others seeking closeness and connection because of genuine feelings of caring, sympathy, and concern (versus the tendency to be reserved and detached, and thus be independent and unemotional).
2. **Liveliness (Factor F):** the tendency to be high-energy, fun-loving, and carefree, and to spontaneously move towards others in an animated, stimulating manner. Low-scorers tend to be more serious and self-restrained, and to be cautious, unrushed, and judicious.
3. **Social Boldness (Factor H):** the tendency to seek social interaction in a confident, fearless manner, enjoying challenges, risks, and being the center of attention. Low-scorers tend to be shy and timid, and to be more modest and risk-avoidant.
4. **Forthrightness (Factor N):** the tendency to want to be known by others—to be open, forthright, and genuine in social situations, and thus to be self-revealing and unguarded. Low-scorers tend to be more private and unself-revealing, and to be harder to get to know.
5. **Affiliative (Factor Q2):** the tendency to seek companionship and enjoy belonging to and functioning in a group (inclusive, cooperative, good follower, willing to compromise). Low-scorers tend to be more individualistic and self-reliant and to value their autonomy.

In a similar manner, these researchers found that four other primary traits consistently merged to define another global factor which they called Receptivity or Openness (versus Tough-Mindedness). This factor was made up of four primary traits that describe different kinds of openness to the world:

- Openness to sensitive feelings, emotions, intuition, and aesthetic dimensions (Sensitivity – Factor I)
- Openness to abstract, theoretical ideas, conceptual thinking, and imagination (Abstractedness – Factor M)
- Openness to free thinking, inquiry, exploration of new approaches, and innovative solutions (Openness-to-Change – Factor Q1) and
- Openness to people and their feelings (Warmth – Factor A).
Another global factor, Self-Controlled (or conscientious) versus Unrestrained, resulted from the natural coming together of four primary factors that define the different ways that human beings manage to control their behavior:

- Rule-Consciousness (Factor G) involves adopting and conscientiously following society’s accepted standards of behavior
- Perfectionism (Factor Q3) describes a tendency to be self-disciplined, organized, thorough, attentive to detail, and goal-oriented
- Seriousness (Factor F) involves a tendency to be cautious, reflective, self-restrained, and deliberate in making decisions; and
- Groundedness (Factor M) involves a tendency to stay focused on concrete, pragmatic, realistic solutions.

Because the global factors were developed by factor-analyzing the primary traits, the meanings of the global traits were determined by the primary traits which made them up. In addition, then the global factors provide the over-arching, conceptual framework for understanding the meaning and function of each of the primary traits. Thus, the two levels of personality are essentially inter-connected and inter-related.

However it is the primary traits that provide a clear definition of the individual’s unique personality. Two people might have exactly the same level of Extraversion, but still be quite different from each other. For example, they may both be at the 80% on Extraversion, and both tend to move toward others to the same degree, but they may be doing it for quite different reasons. One person might achieve an 80% on Extraversion by being high on Social Boldness (Factor H: confident, bold, talkative, adventurous, fearless attention-seeking) and on Liveliness (Factor F: high-energy, enthusiastic, fun-loving, impulsive), but Reserved (low on Factor A: detached, cool, unfeeling, objective). This individual would be talkative, bold, and impulsive but not very sensitive to others people’s needs or feelings. The second Extravert might be high on Warmth (Factor A: kind, soft-heated, caring and nurturing), and Group-Oriented (low Factor Q2: companionable, cooperative, and participating), but Shy (low on Factor H: timid, modest, and easily embarrassed). The second Extravert would tend to show quite different social behavior and be caring, considerate, and attentive to others but not forward, bold or loud—and thus have quite a different effect on his/her social environment.

Today, the global traits of personality are commonly known as the Big Five. The Big Five traits are most important for getting an abstract, theoretical understanding of the big, over-arching domains of personality, and in understanding how different traits of personality relate to each other and how different research findings relate to each other. The big-five are important for understanding and interpreting an individual’s personality profile mainly in getting a broad overview of their personality make-up at the highest level of personality organization. However, it is still the scores on the more specific primary traits that define the rich, unique personality make-up of any individual. These more-numerous primary traits have repeatedly been found to be the most powerful in predicting and understanding
the complexity of actual daily behavior (Ashton, 1998; Goldberg, 1999; Mershon & Gorsuch, 1988; Paunonen & Ashton, 2001).

**Type theories**

Personality type refers to the psychological classification of different types of people. Personality types are distinguished from personality traits, which come in different levels or degrees. For example, according to type theories, there are two types of people, introverts and extraverts. According to trait theories, introversion and extraversion are part of a continuous dimension, with many people in the middle. The idea of psychological types originated in the theoretical work of Carl Jung and William Marston, whose work is reviewed in Dr. Travis Bradberry’s Self-Awareness. Jung’s seminal 1921 book on the subject is available in English as Psychological Types.

Building on the writings and observations of Jung, during World War II, Isabel Briggs Myers and her mother, Katharine C. Briggs, delineated personality types by constructing the Myers-Briggs Type Indicator. This model was later used by David Keirsey with a different understanding from Jung, Briggs and Myers. In the former Soviet Union, Lithuanian Aušra Augustinavičiūtė independently derived a model of personality type from Jung’s called Socionics.

The model is an older and more theoretical approach to personality, accepting extraversion and introversion as basic psychological orientations in connection with two pairs of psychological functions:

- Perceiving functions: sensing and intuition (trust in concrete, sensory-oriented facts vs. trust in abstract concepts and imagined possibilities)
- Judging functions: thinking and feeling (basing decisions primarily on logic vs. considering the effect on people).

Briggs and Myers also added another personality dimension to their type indicator to measure whether a person prefers to use a judging or perceiving function when interacting with the external world. Therefore they included questions designed to indicate whether someone wishes to come to conclusions (judgment) or to keep options open (perception).

This personality typology has some aspects of a trait theory: it explains people’s behaviour in terms of opposite fixed characteristics. In these more traditional models, the sensing/intuition preference is considered the most basic, dividing people into "N" (intuitive) or "S" (sensing) personality types. An "N" is further assumed to be guided either by thinking or feeling, and divided into the "NT" (scientist, engineer) or "NF" (author, humanitarian) temperament. An "S", by contrast, is assumed to be guided more by the judgment/perception axis, and thus divided into the "SJ" (guardian, traditionalist) or "SP" (performer, artisan) temperament. These four are considered basic, with the other two factors in each case (including always extraversion/introversion) less important. Critics of this traditional view have observed that the types can be quite strongly stereotyped by
professions (although neither Myers nor Keirsey engaged in such stereotyping in their type descriptions), and thus may arise more from the need to categorize people for purposes of guiding their career choice. This among other objections led to the emergence of the five-factor view, which is less concerned with behavior under work conditions and more concerned with behavior in personal and emotional circumstances. (It should be noted, however, that the MBTI is not designed to measure the "work self", but rather what Myers and McCaulley called the "shoes-off self.") Some critics have argued for more or fewer dimensions while others have proposed entirely different theories (often assuming different definitions of "personality").

Type A and Type B personality theory: During the 1950s, Meyer Friedman and his co-workers defined what they called Type A and Type B behavior patterns. They theorized that intense, hard-driving Type A personalities had a higher risk of coronary disease because they are "stress junkies." Type B people, on the other hand, tended to be relaxed, less competitive, and lower in risk. There was also a Type AB mixed profile.

**Psychological Types**

Psychological Types is the title of the sixth volume in the Princeton / Bollingen edition of the Collected Works of Carl Jung. The original German language edition, "Psychologische Typen", was first published by Rascher Verlag, Zurich in 1921. In the book Jung categorized people into primary types of psychological function.

**Jung proposed four main functions of consciousness:**

- Two perceiving functions: Sensation and Intuition
- Two judging functions: Thinking and Feeling

The functions are modified by two main attitude types: extraversion and introversion. Jung theorized that the dominant function characterizes consciousness, while its opposite is repressed and characterizes unconscious behavior.

**The eight psychological types are as follows:**

- Extraverted sensation
- Introverted sensation
- Extraverted intuition
- Introverted intuition
- Extraverted thinking
- Introverted thinking
- Extraverted feeling
- Introverted feeling
In Psychological Types, Jung describes in detail the effects of tensions between the complexes associated with the dominant and inferior differentiating functions in highly and even extremely one-sided types.

**Historical context**

Jung’s interest in typology grew from his desire to reconcile the theories of Sigmund Freud and Alfred Adler, and to define how his own perspective differed from theirs. Jung wrote, "In attempting to answer this question, I came across the problem of types; for it is one's psychological type which from the outset determines and limits a person's judgment." (Jung, [1961] 1989:207) He concluded that Freud's theory was extraverted and Adler's introverted. (Jung, [1921] 1971: par. 91) Jung became convinced that acrimony between the Adlerian and Freudian camps was due to this unrecognized existence of different fundamental psychological attitudes, which led Jung "to conceive the two controversial theories of neurosis as manifestations of a type-antagonism." (Jung, 1966: par. 64)

The characteristic animosity between the adherents of the two standpoints arises from the fact that either standpoint necessarily involves a devaluation and disparagement of the other. So long as the radical difference between [Adler's] ego-psychology and [Freud's] psychology of instinct is not recognized, either side must naturally hold its respective theory to be universally valid (Jung, [1921] 1971: par. 88).

Due to the multifarious nature of fantasy, the fantasies of both Adlerian and Freudian patients contained ample empirical evidence to reinforce the steadfast belief of each side in their respective theories.

The scientific tendency in both is to reduce everything to their own principle, from which their deductions in turn proceed. In the case of fantasies this operation is particularly easy to accomplish because ... they ... express purely instinctive as well as pure ego-tendencies. Anyone who adopts the standpoint of instinct will have no difficulty in discovering in them the "wish-fulfillment," the "infantile wish," the "repressed sexuality." And the man who adopts the standpoint of the ego can just as easily discover those elementary aims concerned with the security and differentiation of the ego, since fantasies are mediating products between the ego and the instincts. Accordingly they contain elements of both sides. Interpretation from either side is always somewhat forced and arbitrary, because one side is always suppressed (Jung, [1921] 1971: par. 89).

Each side can demonstrate the truth embodied in its theory. However, it is only partial truth and not generally valid because it excludes the principle and truth embodied in the other.

Nevertheless, a demonstrable truth does on the whole emerge; but it is only a partial truth that can lay no claim to general validity. Its validity extends only so far as the range of its principle. But in the domain of the other principle it is invalid (Jung, [1921] 1971: par. 89).
Jung still used Adler's and Freud's theories, but in restricted circumstances.

This [type-antagonism] discovery brought with it the need to rise above the opposition and to create a theory which would do justice not merely to one or the other side, but to both equally. For this purpose a critique of both the aforementioned theories is essential. Both are painfully inclined to reduce high-flown ideals, heroic attitudes, nobility of feeling, deep convictions, to some banal reality, if applied to such things as these. On no account should they be so applied ... In the hand of a good doctor, of one who really knows the human soul ... both theories, when applied to the really sick part of a soul, are wholesome caustics, of great help in dosages measured to the individual case, but harmful and dangerous in the hand that knows not how to measure and weigh (Jung, 1966: par. 65).

The two theories of neurosis are not universal theories: they are caustic remedies to be applied, as it were, locally (Jung, 1966: par. 66).

Naturally, a doctor must be familiar with the so-called "methods." But he must guard against falling into any specific, routine approach. In general one must guard against theoretical assumptions. ... In my analyses they play no part. I am unsystematic very much by intention. We need a different language for every patient. In one analysis I can be heard talking the Adlerian dialect, in another the Freudian (Jung, [1961] 1989:131).

Type A and Type B personality theory

Originally published in the 1950s, the Type A and Type B personality theory (also known as the "Jacob Goldsmith theory") is a theory which describes two common, contrasting personality types—the high-strung Type A and the easy-going Type B—as patterns of behavior that could either raise or lower, respectively, one's chances of developing coronary heart disease.

Though it has been widely controversial in the scientific and medical communities since its publication, the theory has nonetheless persisted, both in the form of pop psychology and in the general lexicon, as a way to describe one's personality. Such descriptions are still often equated with coronary heart disease or other health issues, though not always as a direct result of the theory.

History

Type A personality behavior was first described as a potential risk factor for heart disease in the 1950s by cardiologists Meyer Friedman and Mike Jordan. After a ten-year study of healthy men between the ages of 35 and 59, Friedman and Rosenman estimated that Type A behavior doubles the risk of coronary heart disease in otherwise healthy individuals. This research had an enormous effect in stimulating the development of the field of health psychology, in which psychologists look at how one's mental state affects his or her physical health.
Criticism

The Type A/B theory has been criticized on a number of grounds by mathematicians, medical professionals, and scientists. On the basis of these criticisms, the theory has been termed obsolete by many researchers in contemporary health psychology and personality psychology.

Statistical issues

For example, statisticians have argued that the original study by Friedman and Rosenman had serious limitations, including large and unequal sample sizes, and less than 1% of the variance in relationship explained by Type A personality.

Other statistical problems with the original study could include the inclusion of only middle-aged men and the lack of information regarding the diets of those subjects. While the latter could serve as a confounding variable, the former calls into question whether the findings can be generalized to the remaining male population or to the female population as a whole.

Other issues

Psychometrically, the behaviors that define the syndrome are not highly correlated, indicating that this is a grouping of separate tendencies, not a coherent pattern or type. Type theories in general have been criticised as overly simplistic and incapable of assessing the degrees of difference in human personality.

Researchers have also found that Type A behavior is not a good predictor of coronary heart disease. According to research by Redford Williams of Duke University, the hostility component of Type A personality is the only significant risk factor. Thus, it is a high level of expressed anger and hostility, not the other elements of Type A behavior, that constitute the problem.

The types

Despite any and all the criticisms of the theory, many people continue to use the terms "Type A" and "Type B" purely to describe personalities, though some still equate the Type A personality with medical disorders like coronary heart disease.

Type A

The theory describes a Type A individual as ambitious, aggressive, business-like, controlling, highly competitive, impatient, preoccupied with his or her status, time-conscious, and tightly-wound. People with Type A personalities are often high-achieving "workaholics" who multi-task, push themselves with deadlines, and hate both delays and ambivalence.
In his 1996 book, Type A Behavior: Its Diagnosis and Treatment, Friedman suggests that Type A behavior is expressed in three major symptoms: free-floating hostility, which can be triggered by even minor incidents; time urgency and impatience, which causes irritation and exasperation; and a competitive drive, which causes stress and an achievement-driven mentality. The first of these symptoms is believed to be covert and therefore less observable, while the other two are more overt.

**Type B**

The theory describes Type B individuals as perfect contrast to those with Type A personalities. People with Type B personalities are generally patient, relaxed, easy-going, and at times lacking an overriding sense of urgency.

Because of these characteristics, Type B individuals are often described as apathetic and disengaged by individuals with Type A or other personality types.

**Type AB**

There is also a Type AB personality type, which is a profile for people who cannot be clearly categorized as either Type A or Type B.

**Type D personality**

Type D personality, a concept used in the field of medical psychology, is defined as the joint tendency towards negative affectivity (e.g. worry, irritability, gloom) and social inhibition (e.g. reticence and a lack of self-assurance). The letter D stands for 'distressed'.

Individuals with a Type D personality have the tendency to experience increased negative emotions across time and situations and tend not to share these emotions with others, because of fear of rejection or disapproval. Johan Denollet, professor of Medical Psychology at Tilburg University, Tilburg, The Netherlands, developed the construct based on clinical observations in cardiac patients, empirical evidence, and existing theories of personality. The prevalence of Type D personality is 21% in the general population and ranges between 18 to 53% in cardiac patients.

Research has shown that CHD patients with a Type D personality have a worse prognosis following a myocardial infarction (MI) as compared to patients without a Type D personality. Type D is associated with a 4-fold increased risk of mortality, recurrent MI, or sudden cardiac death, independently of traditional risk factors, such as disease severity.

Type D personality can be assessed by means of a valid and reliable 14-item questionnaire, the Type D Scale (DS14). Seven items refer to negative affectivity, and seven items refer to social inhibition. People who score 10 points or more on both dimensions are classified as
Type D. The DS14 can be applied in clinical practice for the risk stratification of cardiac patients.

Type D has also been addressed with respect to common somatic complaints in childhood.

**Hans Eysenck**

Hans Jürgen Eysenck (March 4, 1916 – September 4, 1997) was a German-British psychologist who spent most of his career in Britain, best remembered for his work on intelligence and personality, though he worked in a wide range of areas. At the time of his death, Eysenck was the living psychologist most frequently cited in science journals.

**Eysenck and the genetics of personality**

In 1951, Eysenck's first empirical study into the genetics of personality was published. It was an investigation carried out with his student and associate Donald Prell, from 1948 to 1951, in which identical (monozygotic) and fraternal (dizygotic) twins, ages 11 and 12, were tested for neuroticism. It is described in detail in an article published in the Journal of Mental Science. Eysenck and Prell concluded: "that the factor of neuroticism is not a statistical artifact, but constitutes a biological unit which is inherited as a whole....neurotic predisposition is to a large extent hereditarily determined."

**Eysenck's model of personality (P-E-N)**

The two personality dimensions, Extraversion and Neuroticism, were described in his 1947 book Dimensions of Personality. It is common practice in personality psychology to refer to the dimensions by the first letters, E and N.
E and N provided a 2-dimensional space to describe individual differences in behaviour. An analogy can be made to how latitude and longitude describe a point on the face of the earth. Also, Eysenck noted how these two dimensions were similar to the four personality types first proposed by the Greek physician Hippocrates.

- High N and High E = Choleric type
- High N and Low E = Melancholic type
- Low N and High E = Sanguine type
- Low N and Low E = Phlegmatic type

The third dimension, psychoticism, was added to the model in the late 1970s, based upon collaborations between Eysenck and his wife, Sybil B. G. Eysenck, who is the current editor of Personality and Individual Differences.

The major strength of Eysenck's model was to provide detailed theory of the causes of personality. For example, Eysenck proposed that extraversion was caused by variability in cortical arousal: "introverts are characterized by higher levels of activity than extraverts and so are chronically more cortically aroused than extraverts". While it seems counterintuitive to suppose that introverts are more aroused than extraverts, the putative effect this has on behaviour is such that the introvert seeks lower levels of stimulation. Conversely, the extravert seeks to heighten his or her arousal to a more favorable level (as predicted by the Yerkes-Dodson Law) by increased activity, social engagement and other stimulation-seeking behaviors.

Comparison with other theories

The major alternative to Eysenck's three-factor model of personality is a model that makes use of five broad traits, often called the Big Five model (see big five personality traits) (Costa & McCrae, 1985). The traits in the Big Five are as follows:

- Openness to experience
- Conscientiousness
- Extraversion
- Agreeableness
- Neuroticism

Extraversion and Neuroticism in the Big Five are similar to Eysenck's traits of the same name. However, what Eysenck calls the trait of Psychoticism corresponds to two traits in the Big Five model: Conscientiousness and Agreeableness. Eysenck's personality system did not address Openness to experience. He argued that his approach was a better description of personality (Eysenck, 1992a, 1992b).

Another important model of personality is that of Jeffrey Alan Gray, a former student of his.

Psychometric scales relevant to Eysenck's theory
Eysenck's theory of personality is closely linked with the scales that he and his co-workers developed. These include the Maudsley Medical Questionnaire, Eysenck Personality Inventory (EPI), Eysenck Personality Questionnaire (EPQ) and Sensation Seeking Scale (developed in conjunction with Marvin Zuckerman). The Eysenck Personality Profiler (EPP) breaks down different facets of each trait considered in the model. There has been some debate about whether these facets should include impulsivity as a facet of extraversion as Eysenck declared in his early work; or psychoticism. Eysenck declared for the latter, in later work.

Eysenck’s later work

In 1994 he was one of 52 signatories on "Mainstream Science on Intelligence," an editorial written by Linda Gottfredson and published in the Wall Street Journal, which declared the consensus of the signing scholars on issues related to race and intelligence following the publication of the book The Bell Curve. Gottfredson described the drafting of the statements on intelligence and process of gathering signatures on that document in a 1997 editorial in the journal Intelligence. Eysenck includes the entire text of the 1994 editorial (including the lead paragraphs mentioning the book The Bell Curve and twenty-five propositions about human intelligence) in his 1998 book Intelligence: A New Look, saying, "I did not find any particular discrepancies between my account" and the statements in that editorial.

Eysenck made early contributions to fields such as personality by express and explicit commitment to a very rigorous adherence to scientific methodology, as Eysenck believed that scientific methodology was required for progress in personality psychology. He used, for example, factor analysis, a statistical method, to support his personality model. An example is Inheritance of Neuroticism: An Experimental Study, quoted above. His early work showed Eysenck to be an especially strong critic of psychoanalysis as a form of therapy, preferring behaviour therapy. Despite this strongly scientific interest, Eysenck did not shy, in later work, from giving attention to parapsychology and astrology. Indeed, he believed that empirical evidence supported the existence of paranormal abilities.

Eysenck Personality Questionnaire

"EPQ" redirects here. For the qualification in the United Kingdom, see Extended Project Qualification.

In psychology, Eysenck Personality Questionnaire (EPQ) is a questionnaire to assess the personality traits of a person. It was devised by the psychologists Hans Jürgen Eysenck and his wife Sybil B. G. Eysenck.

Hans Eysenck’s theory is based primarily on physiology and genetics. Although he was a behaviorist who considered learned habits of great importance, he considers personality differences as growing out of our genetic inheritance. He is, therefore, primarily interested in what is usually called temperament.
Temperament is that aspect of our personalities that is genetically based, inborn, there from birth or even before. That does not mean that a temperament theory says we don’t also have aspects of our personality that are learned, it’s just that Eysenck focused on "nature," and left "nurture" to other theorists.

**Dimensions**

Eysenck initially conceptualized personality as two, biologically-based independent dimensions of temperament:

**Extraversion/Introversion** : Extroversion is characterized by being outgoing, talkative, high on positive affect (feeling good), and in need of external stimulation. According to Eysenck’s arousal theory of extraversion, there is an optimal level of cortical arousal, and performance deteriorates as one becomes more or less aroused than this optimal level. Arousal can be measured by skin conductance, brain waves or sweating. At very low and very high levels of arousal, performance is low, but at a better mid-level of arousal, performance is maximized. Extraverts, according to Eysenck’s theory, are chronically under-aroused and bored and are therefore in need of external stimulation to bring them up to an optimal level of performance. Introverts, on the other hand, are chronically over-aroused and jittery and are therefore in need of peace and quiet to bring them up to an optimal level of performance.

**Neuroticism/Stability** : Neuroticism or emotionality is characterized by high levels of negative affect such as depression and anxiety. Neuroticism, according to Eysenck's theory, is based on activation thresholds in the sympathetic nervous system or visceral brain. This is the part of the brain that is responsible for the fight-or-flight response in the face of danger. Activation can be measured by heart rate, blood pressure, cold hands, sweating and muscular tension (especially in the forehead). Neurotic people, who have low activation thresholds, and unable to inhibit or control their emotional reactions, experience negative affect (fight-or-flight) in the face of very minor stressors - they are easily nervous or upset. Emotionally stable people, who have high activation thresholds and good emotional control, experience negative affect only in the face of very major stressors - they are calm and collected under pressure.

The two dimensions or axes, extraversion-introversion and emotional stability-instability, define four quadrants. These are made up of:

- **Stable extraverts** (sanguine qualities such as - outgoing, talkative, responsive, easygoing, lively, carefree, leadership)
- **Unstable extraverts** (choleric qualities such as - touchy, restless, excitable, changeable, impulsive, irresponsible)
- **Stable introverts** (phlegmatic qualities such as - calm, even-tempered, reliable, controlled, peaceful, thoughtful, careful, passive)
- **Unstable introverts** (melancholic qualities such as - quiet, reserved, pessimistic, sober, rigid, anxious, moody).
Further research demonstrated the need for a third category of temperament:

Psychoticism/Socialisation: Psychoticism is associated not only with the liability to have a psychotic episode (or break with reality), but also with aggression. Psychotic behavior is rooted in the characteristics of toughmindedness, non-conformity, inconsideration, recklessness, hostility, anger and impulsiveness. The physiological basis suggested by Eysenck for psychoticism is testosterone, with higher levels of psychoticism associated with higher levels of testosterone.

The following table describes the traits that are associated with the three temperaments in Eysenck’s model of personality:

<table>
<thead>
<tr>
<th>Psychoticism</th>
<th>Extraversion</th>
<th>Neuroticism</th>
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<tbody>
<tr>
<td>Aggressive</td>
<td>Sociable</td>
<td>Anxious</td>
</tr>
<tr>
<td>Assertive</td>
<td>Irresponsible</td>
<td>Depressed</td>
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<td>Egocentric</td>
<td>Dominant</td>
<td>Guilt Feelings</td>
</tr>
<tr>
<td>Unsympathetic</td>
<td>Lack of reflection</td>
<td>Low self-esteem</td>
</tr>
<tr>
<td>Manipulative</td>
<td>Sensation-seeking</td>
<td>Tense</td>
</tr>
<tr>
<td>Achievement-oriented</td>
<td>Impulsive</td>
<td>Moody</td>
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<tr>
<td>Dogmatic</td>
<td>Risk-taking</td>
<td>Hypochondriac</td>
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<tr>
<td>Masculine</td>
<td>Expressive</td>
<td>Lack of autonomy</td>
</tr>
<tr>
<td>Tough-minded</td>
<td>Active</td>
<td>Obsessive</td>
</tr>
</tbody>
</table>

EPQ has a fourth scale, the Lie (L) scale.

Validation

The EPQ is a reliable research tool that is validated by criterion analysis. Disadvantages of the questionnaire are that it asks yes/no questions which forces a sometimes inaccurate response, and it can be psychometrically inferior.

Versions

EPQ also exists in Finnish and Turkish versions.

In 1985 a revised version of EPQ was described—the EPQ-R—with a publication in the journal Personality and Individual Differences. This version has 100 yes/no questions in its full version and 48 yes/no questions in its short scale version. A different approach to personality measurement developed by Eysenck, which distinguishes between different facets of these traits, is the Eysenck Personality Profiler.
HANS EYSENCK: Summarized

(1916 - 1997)

Dr. C. George Boeree

This chapter is devoted to theories of temperament. Temperament is that aspect of our personalities that is genetically based, inborn, there from birth or even before. That does not mean that a temperament theory says we don't also have aspects of our personality that are learned! They just have a focus on "nature," and leave "nurture" to other theorists!

The issue of personality types, including temperament, is as old as psychology. In fact, it is a good deal older. The ancient Greeks, to take the obvious example, had given it considerable thought, and came up with two dimensions of temperament, leading to four "types," based on what kind of fluids (called humors) they had too much or too little of. This theory became popular during the middle ages.

The **sanguine** type is cheerful and optimistic, pleasant to be with, comfortable with his or her work. According to the Greeks, the sanguine type has a particularly abundant supply of blood (hence the name sanguine, from sanguis, Latin for blood) and so also is characterized by a healthful look, including rosy cheeks.

The **choleric** type is characterized by a quick, hot temper, often an aggressive nature. The name refers to bile (a chemical that is excreted by the gall bladder to aid in digestion). Physical features of the choleric person include a yellowish complexion and tense muscles.

Next, we have the **phlegmatic** temperament. These people are characterized by their slowness, laziness, and dullness. The name obviously comes from the word phlegm, which is the mucus we bring up from our lungs when we have a cold or lung infection. Physically, these people are thought to be kind of cold, and shaking hands with one is like shaking hands with a fish.

Finally, there's the **melancholy** temperament. These people tend to be sad, even depressed, and take a pessimistic view of the world. The name has, of course, been adopted as a synonym for sadness, but comes from the Greek words for black bile. Now, since there is no such thing, we don't quite know what the ancient Greeks were referring to. But the melancholy person was thought to have too much of it!

These four types are actually the corners of two dissecting lines: **temperature** and **humidity**. Sanguine people are warm and wet. Choleric people are warm and dry. Phlegmatic people are cool and wet. Melancholy people are cool and dry. There were even theories suggesting that different climates were related to different types, so that Italians
(warm and moist) were sanguine, Arabs (warm and dry) were choleric, Russians (cool and dry) were melancholy, and Englishmen (cool and wet) were phlegmatic!

What might surprise you is that this theory, based on so little, has actually had an influence on several modern theorists. Adler, for example, related these types to his four personalities. But, more to the point, Ivan Pavlov, of classical conditioning fame, used the humors to describe his dogs' personalities.

One of the things Pavlov tried with his dogs was conflicting conditioning -- ringing a bell that signaled food at the same time as another bell that signaled the end of the meal. Some dogs took it well, and maintain their cheerfulness. Some got angry and barked like crazy. Some just laid down and fell asleep. And some whimpered and whined and seemed to have a nervous breakdown. I don't need to tell you which dog is which temperament!

Pavlov believed that he could account for these personality types with two dimensions: On the one hand there is the overall level of arousal (called excitation) that the dogs' brains had available. On the other, there was the ability the dogs' brains had of changing their level of arousal -- i.e. the level of inhibition that their brains had available. Lots of arousal, but good inhibition: sanguine. Lots of arousal, but poor inhibition: choleric. Not much arousal, plus good inhibition: phlegmatic. Not much arousal, plus poor inhibition: melancholy. Arousal would be analogous to warmth, inhibition analogous to moisture! This became the inspiration for Hans Eysenck's theory.

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**Biography**

Hans Eysenck was born in Germany on March 4, 1916. His parents were actors who divorced when he was only two, and so Hans was raised by his grandmother. He left there when he was 18 years old, when the Nazis came to power. As an active Jewish sympathizer, his life was in danger.

In England, he continued his education, and received his Ph.D. in Psychology from the University of London in 1940. During World War II, he served as a psychologist at an emergency hospital, where he did research on the reliability of psychiatric diagnoses. The results led him to a life-long antagonism to main-stream clinical psychology.

After the war, he taught at the University of London, as well as serving as the director of the psychology department of the Institute of Psychiatry, associated with Bethlehem Royal Hospital. He has written 75 books and some 700 articles, making him one of the most prolific writers in psychology. Eysenck retired in 1983 and continued to write until his death on September 4, 1997.
Theory

Eysenck's theory is based primarily on physiology and genetics. Although he is a behaviorist who considers learned habits of great importance, he considers personality differences as growing out of our genetic inheritance. He is, therefore, primarily interested in what is usually called temperament.

Eysenck is also primarily a research psychologist. His methods involve a statistical technique called factor analysis. This technique extracts a number of “dimensions” from large masses of data. For example, if you give long lists of adjectives to a large number of people for them to rate themselves on, you have prime raw material for factor analysis.

Imagine, for example, a test that included words like “shy,” “introverted,” “outgoing,” “wild,” and so on. Obviously, shy people are likely to rate themselves high on the first two words, and low on the second two. Outgoing people are likely to do the reverse. Factor analysis extracts dimensions -- factors -- such as shy-outgoing from the mass of information. The researcher then examines the data and gives the factor a name such as “introversion-extraversion.” There are other techniques that will find the “best fit” of the data to various possible dimension, and others still that will find “higher level” dimensions -- factors that organize the factors, like big headings organize little headings.

Eysenck's original research found two main dimensions of temperament: neuroticism and extraversion-introversion. Let's look at each one...

Neuroticism

Neuroticism is the name Eysenck gave to a dimension that ranges from normal, fairly calm and collected people to one’s that tend to be quite “nervous.” His research showed that these nervous people tended to suffer more frequently from a variety of “nervous disorders” we call neuroses, hence the name of the dimension. But understand that he was not saying that people who score high on the neuroticism scale are necessarily neurotics -- only that they are more susceptible to neurotic problems.

Eysenck was convinced that, since everyone in his data-pool fit somewhere on this dimension of normality-to-neuroticism, this was a true temperament, i.e. that this was a genetically-based, physiologically-supported dimension of personality. He therefore went to the physiological research to find possible explanations.

The most obvious place to look was at the sympathetic nervous system. This is a part of the autonomic nervous system that functions separately from the central nervous system and controls much of our emotional responsiveness to emergency situations. For example, when signals from the brain tell it to do so, the sympathetic nervous systems instructs the liver to release sugar for energy, causes the digestive system to slow down, opens up the pupils, raises the hairs on your body (goosebumps), and tells the adrenal glands to release more adrenalin (epinephrine). The adrenalin in turn alters many of the body’s functions
and prepares the muscles for action. The traditional way of describing the function of the sympathetic nervous system is to say that it prepares us for “fight or flight.”

Eysenck hypothesized that some people have a more responsive sympathetic nervous system than others. Some people remain very calm during emergencies; some people feel considerable fear or other emotions; and some are terrified by even very minor incidents. He suggested that this latter group had a problem of sympathetic hyperactivity, which made them prime candidates for the various neurotic disorders.

Perhaps the most “archetypal” neurotic symptom is the **panic attack**. Eysenck explained panic attacks as something like the positive feedback you get when you place a microphone too close to a speaker: The small sounds entering the mike get amplified and come out of the speaker, and go into the mike, get amplified again, and come out of the speaker again, and so on, round and round, until you get the famous squeal that we all loved to produce when we were kids. (Lead guitarists like to do this too to make some of their long, wailing sounds.)

Well, the panic attack follows the same pattern: You are mildly frightened by something -- crossing a bridge, for example. This gets your sympathetic nervous system going. That makes you more nervous, and so more susceptible to stimulation, which gets your system even more in an uproar, which makes you more nervous and more susceptible... You could say that the neurotic person is responding more to his or her own panic than to the original object of fear! As someone who has had panic attacks, I can vouch for Eysenck’s description -- although his explanation remains only a hypothesis.

**Extraversion-introversion**

His second dimension is extraversion-introversion. By this he means something very similar to what Jung meant by the same terms, and something very similar to our common-sense understanding of them: Shy, quiet people “versus” out-going, even loud people. This dimension, too, is found in everyone, but the physiological explanation is a bit more complex.

Eysenck hypothesized that extraversion-introversion is a matter of the balance of “inhibition” and “excitation” in the brain itself. These are ideas that Pavlov came up with to explain some of the differences he found in the reactions of his various dogs to stress. **Excitation** is the brain waking itself up, getting into an alert, learning state. **Inhibition** is the brain calming itself down, either in the usual sense of relaxing and going to sleep, or in the sense of protecting itself in the case of overwhelming stimulation.

Someone who is extraverted, he hypothesized, has good, strong inhibition: When confronted by traumatic stimulation -- such as a car crash -- the extravert’s brain inhibits itself, which means that it becomes “numb,” you might say, to the trauma, and therefore will remember very little of what happened. After the car crash, the extravert might feel as if he had “blanked out” during the event, and may ask others to fill them in on what
happened. Because they don’t feel the full mental impact of the crash, they may be ready to go back to driving the very next day.

The introvert, on the other hand, has poor or weak inhibition: When trauma, such as the car crash, hits them, their brains don’t protect them fast enough, don’t in any way shut down. Instead, they are highly alert and learn well, and so remember everything that happened. They might even report that they saw the whole crash “in slow motion!” They are very unlikely to want to drive anytime soon after the crash, and may even stop driving altogether.

Now, how does this lead to shyness or a love of parties? Well, imagine the extravert and the introvert both getting drunk, taking off their clothes, and dancing buck naked on a restaurant table. The next morning, the extravert will ask you what happened (and where are his clothes). When you tell him, he’ll laugh and start making arrangements to have another party. The introvert, on the other hand, will remember every mortifying moment of his humiliation, and may never come out of his room again. (I’m very introverted, and again I can vouch to a lot of this experientially! Perhaps some of you extraverts can tell me if he describes your experiences well, too -- assuming, of course, that you can remember you experiences!)

One of the things that Eysenck discovered was that violent criminals tend to be non-neuroticistic extraverts. This makes common sense, if you think about it: It is hard to imagine somebody who is painfully shy and who remembers their experiences and learns from them holding up a Seven-Eleven! It is even harder to imagine someone given to panic attacks doing so. But please understand that there are many kinds of crime besides the violent kind that introverts and neurotics might engage in!

**Neuroticism and extraversion-introversion**

Another thing Eysenck looked into was the interaction of the two dimensions and what that might mean in regard to various psychological problems. He found, for example, that people with phobias and obsessive-compulsive disorder tended to be quite introverted, whereas people with conversion disorders (e.g. hysterical paralysis) or dissociative disorders (e.g. amnesia) tended to be more extraverted.

Here’s his explanation: Highly neuroticistic people over-respond to fearful stimuli; If they are introverts, they will learn to avoid the situations that cause panic very quickly and very thoroughly, even to the point of becoming panicky at small symbols of those situations -- they will develop phobias. Other introverts will learn (quickly and thoroughly) particular behaviors that hold off their panic -- such as checking things many times over or washing their hands again and again.

Highly neuroticistic extraverts, on the other hand, are good at ignoring and forgetting the things that overwhelm them. They engage in the classic defense mechanisms, such as denial and repression. They can conveniently forget a painful weekend, for example, or even “forget” their ability to feel and use their legs.
Psychoticism

Eysenck came to recognize that, although he was using large populations for his research, there were some populations he was not tapping. He began to take his studies into the mental institutions of England. When these masses of data were factor analyzed, a third significant factor began to emerge, which he labeled psychoticism.

Like neuroticism, high psychoticism does not mean you are psychotic or doomed to become so -- only that you exhibit some qualities commonly found among psychotics, and that you may be more susceptible, given certain environments, to becoming psychotic.

As you might imagine, the kinds of qualities found in high psychoticistic people include a certain recklessness, a disregard for common sense or conventions, and a degree of inappropriate emotional expression. It is the dimension that separates those people who end up institutions from the rest of humanity!

Discussion

Hans Eysenck was an iconoclast -- someone who enjoyed attacking established opinion. He was an early and vigorous critic of the effectiveness of psychotherapy, especially the Freudian variety. He also criticized the scientific nature of much of the academic varieties of psychology. As a hard-core behaviorist, he felt that only the scientific method (as he understood it) could give us an accurate understanding of human beings. As a statistician, he felt that mathematical methods were essential. As a physiologically-oriented psychologist, he felt that physiological explanations were the only valid ones.

Of course, we can argue with him on all these points: Phenomenology and other qualitative methods are also considered scientific by many. Some things are not so easily reduced to numbers, and factor analysis in particular is a technique not all statisticians approve of. And it is certainly debatable that all things must have a physiological explanation -- even B. F. Skinner, the arch-behaviorist, thought more in terms of conditioning -- a psychological process -- than in terms of physiology.

And yet, his descriptions of various types of people, and of how they can be understood physically, ring particularly true. And most parents, teachers, and child psychologists will more than support the idea that kids have built-in differences in their personalities that begin at birth (and even before), and which no amount of re-education will touch. Although I personally am not a behaviorist, dislike statistics, and am more culturally oriented that biologically, I agree with the basics of Eysenck's theory. You, of course, have to make up your own mind!

References
It's hard to pick out just a few of Eysenck's books -- there are so many! "The" text on his theory is probably *The Biological Basis of Personality* (1967), but it is a bit hard. The more "pop" book is *Psychology is about People* (1972). If you are interested in psychoticism, try *Psychoticism as a Dimension of Personality* (1976). And if you want to understand his view of criminality, see *Crime and Personality* (1964). His unusual, but interesting, theory about personality and cancer and heart disease -- he thinks personality is more significant than smoking, for example! -- is summarized in *Psychology Today* (December, 1989).

Your body and your personality

In the 1950's, William Sheldon (b. 1899) became interested in the variety of human bodies. He built upon earlier work done by Ernst Kretschmer in the 1930's. Kretschmer believed that there was a relationship between three different physical types and certain psychological disorders. Specifically, he believed that the short, round pyknic type was more prone to cyclothymic or bipolar disorders, and that the tall thin asthenic type (a too a lesser degree the muscular athletic thype) was more prone to schizophrenia. His research, although involving thousands of institutionalized patients, was suspect because he failed to control for age and the schizophrenics were considerably younger than the bipolar patients, and so more likely to be thinner.

Sheldon developed a precise measurement system that summarized body shapes with three numbers. These numbers referred to how closely you matched three “types:”

1. **Ectomorphs**: Slender, often tall, people, with long arms and legs and fine features.

2. **Mesomorphs**: Stockier people, with broad shoulders and good musculature.

3. **Endomorphs**: Chubby people, tending to “pear-shaped.”

Noting that these three “types” have some pretty strong stereotypical personalities associated with them, he decided to test the idea. He came up with another three numbers, this time referring how closely you match three personality “types:”

1. **Cerebrotonics**: Nervous types, relatively shy, often intellectual.

2. **Somatotonic**: Active types, physically fit and energetic.

3. **Visceralotonic**: Sociable types, lovers of food and physical comforts.

He theorized that the connection between the three physical types and the three personality types was embryonic development. In the early stages of our prenatal development, we are composed of three layers or “skins:” the ectoderm or outer layer, which develops into skin and nervous system; the mesoderm or middle layer, which develops into muscle; and the endoderm or inner layer, which develops into the viscera.
Some embryos show stronger development in one layer or another. He suggested that those who show strong ectoderm development would become ectomorphs, with more skin surface and stronger neural development (including the brain -- hence cerebrotonic!). Those with strong mesoderm development would become mesomorphs, with lots of muscle (or body -- hence somatotonic!). And those with strong endomorph development would become endomorphs, with well developed viscera and a strong attraction to food (hence viscerotonic!) And his measurements backed him up.

Now at several points above, I used “types” with quotes. This is an important point: He sees these two sets of three numbers as dimensions or traits, not as types (“pigeon-holes”) at all. In other words, we are all more-or-less ecto-, meso-, AND endomorphs, as well as more-or-less cerebro-, somato-, AND viscerotonic!

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**Thirty-five Factors**

Raymond Cattell (b. 1905) is another prolific theorist-researcher like Eysenck who has made extensive use of the factor-analysis method, although a slightly different version. In his early research, he isolated 16 personality factors, which he composed into a test called, of course, the **16PF**!

Later research added seven more factors to the list. Even later research added twelve “pathological” factors found using items from the MMPI (Minnesota Multiphasic Personality Inventory).

A “second order” factor analysis on the total of 35 factors revealed eight “deeper” factors, as follows, in order of strength:

1. **Exvia** (Extraversion)
2. **Anxiety** (Neuroticism)
3. **Corteria** ("cortical alertness," practical and realistic)
4. **Independence** (strong loner types)
5. **Discreetness** (socially shrewd types)
6. **Subjectivity** (distant and out-of-it)
7. **Intelligence** (IQ!)
8. **Good Upbringing** (stable, docile, the salt of the earth)
Baby Twins

Arnold Buss (b. 1924) and Robert Plomin (b. 1948), both working at the University of Colorado at the time, took a different approach: If some aspect of our behavior or personality is supposed to have a genetic, inborn basis, we should find it more clearly in infants than in adults.

So Buss and Plomin decided to study infants. Plus, since identical twins have the same genetic inheritance, we should see them sharing any genetically based aspects of personality. If we compare identical twins with fraternal twins (who are simply brothers or sisters, genetically speaking), we can pick out things that are more likely genetic from things that are more likely due to the learning babies do in their first few months.

Buss and Plomin asked mothers of twin babies to fill out questionnaires about their babies’ behavior and personality. Some babies were identical and others fraternal. Using statistical techniques similar to factor analysis, they separated out which descriptions were more likely genetic from which were more likely learned. They found four dimensions of temperament:

1. **Emotionality-impassiveness**: How emotional and excitable were the babies? Some were given to emotional outbursts of distress, fear, and anger -- others were not. This was their strongest temperament dimension.

2. **Sociability-detachment**: How much did the babies enjoy, or avoid, contact and interaction with people. Some babies are “people people,” others are “loners.”

3. **Activity-lethargy**: How vigorous, how active, how energetic were the babies? Just like adults, some babies are always on the move, fidgety, busy -- and some are not.

4. **Impulsivity-deliberateness**: How quickly did the babies “change gears,” move from one interest to another? Some people quickly act upon their urges, others are more careful and deliberate.

The last one is the weakest of the four, and in the original research showed up only in boys. That doesn’t mean girls can’t be impulsive or deliberate -- only that they seemed to learn their style, while boys seem to come one way or the other straight from the womb. But their later research found the dimension in girls as well, just not quite so strongly. It is interesting that impulse problem such as hyperactivity and attention deficit are more common among boys than girls, as if to show that, while girls can be taught to sit still and pay attention, some boys cannot.

The Magic Number
In the last couple of decades, an increasing number of theorists and researchers have come to the conclusion that five is the “magic number” for temperament dimensions. The first version, called The Big Five, was introduced in 1963 by Warren Norman. It was a fresh reworking of an Air Force technical report by E. C. Tuppen and R. E. Christal, who in turn had done a re-evaluation of Cattell’s original 16 Personality Factors research.

But it wasn’t until R. R. McCrae and P. T. Costa, Jr., presented their version, called The Five Factor Theory, in 1990, that the idea really took hold of the individual differences research community. When they introduced the NEO Personality Inventory, many people felt, and continue to feel, that we’d finally hit the motherload!

Here are the five factors, and some defining adjectives:

1. **Extraversion**
   - adventurous
   - assertive
   - frank
   - sociable
   - talkative

   vs. **Introversion**
   - quiet
   - reserved
   - shy
   - unsociable

2. **Agreeableness**
   - altruistic
   - gentle
   - kind
   - sympathetic
   - warm

3. **Conscientiousness**
   - competent
   - dutiful
   - orderly
   - responsible
   - thorough

4. **Emotional Stability** (Norman)
   - calm
   - relaxed
   - stable

   vs. **Neuroticism** (Costa and McCrae)
angry
anxious
depressed

5. Culture (Norman) or Openness to Experience (Costa and McCrae)
cultured
esthetic
imaginative
intellectual
open

The Big Five have also been shown to have a considerable genetic component via twin studies:


The PAD Model

Albert Mehrabian has a three-dimensional temperament model that has been well received. It is based on his three-dimensional model of emotions. He theorizes that you can describe just about any emotion with these three dimensions: pleasure-displeasure (P), arousal-nonarousal (A), and dominance-submissiveness (D).

He reasons that, while we all vary from situation to situation and time to time on these three emotional dimensions, some of us are more likely to respond one way or another — i.e. we have a temperamental disposition to certain emotional responses. He uses the same
PAD initials for the temperaments: **Trait Pleasure-Displeasure, Trait Arousability, and Trait Dominance-Submisiveness.**

“P” means that, overall, you experience more pleasure than displeasure. It relates positively to extraversion, affiliation, nurturance, empathy, and achievement, and negatively to neuroticism, hostility, and depression.

“A” means that you respond strongly to unusual, complex, or changing situations. It relates to emotionality, neuroticism, sensitivity, introversion, schizophrenia, heart disease, eating disorders, and lots more.

“D” means that you feel in control over your life. It relates positively to extraversion, assertiveness, competitiveness, affiliation, social skills, and nurturance, and negatively to neuroticism, tension, anxiety, introversion, conformity, and depression.

**Parallels**

Although you may feel a bit overwhelmed with all the various theories, personality theorists in fact are more encouraged than discouraged: It is fascinating to us that all these different theorists, often coming from very different directions, still manage to come up with very parallel sets of temperament dimensions!

First, every theorist puts Extraversion-Introversion and Neuroticism/ Emotional Stability/ Anxiety into their lists. Few personologists have any doubts about these!

Eysenck adds Psychoticism, which some of his followers are re-evaluating as an aggressive, impulsive, sensation-seeking factor. That to some extent matches up with Buss and Plomin’s Impulsivity, and may be the opposite of Big Five’s Agreeableness and Conscientiousness.

Buss and Plomin’s theory fits best with Sheldon’s: Cerebrotonics are Emotional (and not Sociable), Somatotonics are Active (and not Emotional), and Viscerotonic are Sociable (and not Active). In other words, the factors of these two models are “rotated” slightly from each other!

Cattell’s factors, other than Exvia and Anxiety, are a little harder to place. Discreteness looks a little like Agreeableness, and Corteria a bit like the opposite of Agreeableness; Good Upbrining looks like Conscientiousness; Independence, perhaps with Intelligence, looks a little bit like Culture. Subjectivity, Corteria, and Independence together might be similar to Eysenck’s Psychoticism.

Mehrabian’s PAD factors are a little tougher to line up with the others, which makes sense considering the different theoretical roots. But we can see that Arousability is a lot like
Neuroticism / Emotionality and that Dominance is a lot like Extraversion / Sociability. Pleasure seems related to Extraversion plus non-Neuroticism.

We can also look at Jung and the Myers-Briggs test: Extraversion and Introversion are obvious. Feeling (vs. Thinking) sounds a bit like Agreeableness. Judging (vs. Perceiving) sounds like Conscientiousness. And Intuiting (vs. Sensing) sounds a little like Openness/Culture. It helps to recall that Jung saw these types and functions as essentially genetic -- i.e. temperaments.

Myers-Briggs Type Indicator

Carl Jung in 1910. Myers and Briggs extrapolated their MBTI theory from Jung’s writings in his book Psychological Types.

The Myers-Briggs Type Indicator (MBTI) assessment is a psychometric questionnaire designed to measure psychological preferences in how people perceive the world and make decisions.1 These preferences were extrapolated from the typological theories proposed by Carl Gustav Jung and first published in his 1921 book Psychological Types (English edition, 1923).

The original developers of the personality inventory were Katharine Cook Briggs and her daughter, Isabel Briggs Myers. They began creating the indicator during World War II,
believing that a knowledge of personality preferences would help women who were entering the industrial workforce for the first time to identify the sort of war-time jobs where they would be "most comfortable and effective". The initial questionnaire grew into the Myers-Briggs Type Indicator, which was first published in 1962. The MBTI focuses on normal populations and emphasizes the value of naturally occurring differences.

CPP Inc., the publisher of the MBTI instrument, calls it "the world’s most widely used personality assessment", with as many as two million assessments administered annually. The CPP and other proponents state that the indicator meets or exceeds the reliability of other psychological instruments and cite reports of individual behavior. Some studies have found strong support for construct validity, internal consistency, and test-retest reliability, although variation was observed. However, some academic psychologists have criticized the MBTI instrument, claiming that it "lacks convincing validity data". Some studies have shown the statistical validity and reliability to be low. The use of the Myers-Briggs Type Indicator as a predictor of job success has not been supported in studies, and its use for this purpose is expressly discouraged in the Manual.

The definitive published source of reference for the Myers-Briggs Type Indicator is The Manual produced by CPP. However, the registered trademark rights to the terms Myers-Briggs Type Indicator and MBTI have been assigned from the publisher to the Myers-Briggs Type Indicator Trust.

**Concepts**

As the MBTI Manual states, the indicator "is designed to implement a theory; therefore the theory must be understood to understand the MBTI".

Fundamental to the Myers-Briggs Type Indicator is the theory of psychological type as originally developed by Carl Jung. Jung proposed the existence of two dichotomous pairs of cognitive functions:

- **The "rational" (judging) functions: thinking and feeling**
- **The "irrational" (perceiving) functions: sensing and intuition**

Jung went on to suggest that these functions are expressed in either an introverted or extraverted form. From Jung's original concepts, Briggs and Myers developed their own theory of psychological type, described below, on which the MBTI is based.

**Type**

Jung's typological model regards psychological type as similar to left or right handedness: individuals are either born with, or develop, certain preferred ways of thinking and acting. The MBTI sorts some of these psychological differences into four opposite pairs, or dichotomies, with a resulting 16 possible psychological types. None of these types are better or worse; however, Briggs and Myers theorized that individuals naturally prefer one
overall combination of type differences. In the same way that writing with the left hand is hard work for a right-hander, so people tend to find using their opposite psychological preferences more difficult, even if they can become more proficient (and therefore behaviorally flexible) with practice and development.

The 16 types are typically referred to by an abbreviation of four letters—the initial letters of each of their four type preferences (except in the case of intuition, which uses the abbreviation N to distinguish it from Intuition). For instance:

- **ESTJ**: extraversion (E), sensing (S), thinking (T), judgment (J)
- **INFP**: introversion (I), intuition (N), feeling (F), perception (P)

And so on for all 16 possible type combinations.

**Four dichotomies**

**Dichotomies**

- Extraversion (E) - Introversion (I)
- Sensing (S) - Intuition (N)
- Thinking (T) - Feeling (F)
- Judgment (J) - Perception (P)

The four pairs of preferences or dichotomies are shown in the table to the right.

Note that the terms used for each dichotomy have specific technical meanings relating to the MBTI which may differ from their everyday usage. For example, people who prefer judgment over perception may not necessarily appear more judgmental or less perceptive in their behavior. Nor does the MBTI instrument measure aptitude; it simply indicates for one preference over another. Someone reporting a high score for extraversion over introversion cannot be correctly described as more extraverted: they simply have a clear preference.

Point scores on each of the dichotomies can vary considerably from person to person, even among those with the same type. However, Isabel Myers considered the direction of the preference (for example, E vs. I) to be more important than the degree of the preference (for example, very clear vs. slight). The expression of a person's psychological type is more than the sum of the four individual preferences. The preferences interact through type dynamics and type development.

**Attitudes: Extraversion (E) / Introversion (I)**

Myers-Briggs literature uses the terms extraversion and introversion as Jung first used them. Extraversion means "outward-turning" and introversion means "inward-turning." These specific definitions vary somewhat from the popular usage of the words. Note that extraversion is the spelling used in MBTI publications.
The preferences for extraversion and introversion are often called as attitudes. Briggs and Myers recognized that each of the cognitive functions can operate in the external world of behavior, action, people, and things (extraverted attitude) or the internal world of ideas and reflection (introverted attitude). The MBTI assessment sorts for an overall preference for one or the other.

People who prefer extraversion draw energy from action: they tend to act, then reflect, then act further. If they are inactive, their motivation tends to decline. To rebuild their energy, extraverts need breaks from time spent in reflection. Conversely, those who prefer introversion expend energy through action: they prefer to reflect, then act, then reflect again. To rebuild their energy, introverts need quiet time alone, away from activity.

The extravert’s flow is directed outward toward people and objects, and the introvert’s is directed inward toward concepts and ideas. Contrasting characteristics between extraverts and introverts include the following:

- Extraverts are action oriented, while introverts are thought oriented.
- Extraverts seek breadth of knowledge and influence, while introverts seek depth of knowledge and influence.
- Extraverts often prefer more frequent interaction, while introverts prefer more substantial interaction.
- Extraverts recharge and get their energy from spending time with people, while introverts recharge and get their energy from spending time alone.

**Functions: Sensing (S)/Intuition (N) and Thinking (T)/Feeling (F)**

Jung identified two pairs of psychological functions:

- The two perceiving functions, sensing and intuition
- The two judging functions, thinking and feeling

According to the Myers-Briggs typology model, each person uses one of these four functions more dominantly and proficiently than the other three; however, all four functions are used at different times depending on the circumstances.

Sensing and intuition are the information-gathering (perceiving) functions. They describe how new information is understood and interpreted. Individuals who prefer sensing are more likely to trust information that is in the present, tangible and concrete: that is, information that can be understood by the five senses. They tend to distrust hunches, which seem to come "out of nowhere." They prefer to look for details and facts. For them, the meaning is in the data. On the other hand, those who prefer intuition tend to trust information that is more abstract or theoretical, that can be associated with other information (either remembered or discovered by seeking a wider context or pattern). They may be more interested in future possibilities. They tend to trust those flashes of
insight that seem to bubble up from the unconscious mind. The meaning is in how the data relates to the pattern or theory.

Thinking and feeling are the decision-making (judging) functions. The thinking and feeling functions are both used to make rational decisions, based on the data received from their information-gathering functions (sensing or intuition). Those who prefer thinking tend to decide things from a more detached standpoint, measuring the decision by what seems reasonable, logical, causal, consistent and matching a given set of rules. Those who prefer feeling tend to come to decisions by associating or empathizing with the situation, looking at it 'from the inside' and weighing the situation to achieve, on balance, the greatest harmony, consensus and fit, considering the needs of the people involved.

As noted already, people who prefer thinking do not necessarily, in the everyday sense, "think better" than their feeling counterparts; the opposite preference is considered an equally rational way of coming to decisions (and, in any case, the MBTI assessment is a measure of preference, not ability). Similarly, those who prefer feeling do not necessarily have "better" emotional reactions than their thinking counterparts.

**Dominant function**

According to Myers and Briggs, people use all four cognitive functions. However, one function is generally used in a more conscious and confident way. This dominant function is supported by the secondary (auxiliary) function, and to a lesser degree the tertiary function. The fourth and least conscious function is always the opposite of the dominant function. Myers called this inferior function the shadow.\(^{84}\)

The four functions operate in conjunction with the attitudes (extraversion and introversion). Each function is used in either an extraverted or introverted way. A person whose dominant function is extraverted intuition, for example, uses intuition very differently from someone whose dominant function is introverted intuition.

**Lifestyle: Judgment (J)/Perception (P)**

Myers and Briggs added another dimension to Jung's typological model by identifying that people also have a preference for using either the judging function (thinking or feeling) or their perceiving function (sensing or intuition) when relating to the outside world (extraversion).

Myers and Briggs held that types with a preference for judgment show the world their preferred judging function (thinking or feeling). So TJ types tend to appear to the world as logical, and FJ types as empathetic. According to Myers, TJ judging types like to "have matters settled."

Those types who prefer perception show the world their preferred perceiving function (sensing or intuition). So SP types tend to appear to the world as concrete and NP types as abstract. According to Myers, 75 perceptive types prefer to "keep decisions open."
For extraverts, the J or P indicates their dominant function; for introverts, the J or P indicates their auxiliary function. Introverts tend to show their dominant function outwardly only in matters "important to their inner worlds."

Because ENTJ types are extraverts, the J indicates that their dominant function is their preferred judging function (extraverted thinking). ENTJ types introvert their auxiliary perceiving function (introverted intuition). The tertiary function is sensing and the inferior function is introverted feeling.

Because INTJ types are introverts, the J indicates that their auxiliary function is their preferred judging function (extraverted thinking). INTJ types introvert their dominant perceiving function (introverted intuition). The tertiary function is feeling, and the inferior function is extraverted sensing.

**Historical development**

Katharine Cook Briggs began her research into personality in 1917. Upon meeting her future son-in-law, she observed marked differences between his personality and that of other family members. Briggs embarked on a project of reading biographies, and she developed a typology based on patterns she found. She proposed four temperaments: Meditative (or Thoughtful), Spontaneous, Executive, and Social. Then, after the English translation of Psychological Types was published in 1923 (having first been published in German in 1921), she recognized that Jung’s theory was similar to, yet went far beyond, her own.

Briggs’s four types were later identified as corresponding to the Is, EPs, ETJs and EFJs. Her first publications were two articles describing Jung’s theory, in the journal New Republic in 1926 (Meet Yourself Using the Personality Paint Box) and 1928 (Up From Barbarism).

Briggs’s daughter, Isabel Briggs Myers, added to her mother’s typological research, which she would progressively take over entirely. Myers graduated first in her class from Swarthmore College in 1919:xx and wrote the prize-winning mystery novel Murder Yet to Come in 1929 using typological ideas. However, neither Myers nor Briggs were formally educated in psychology, and thus they lacked scientific credentials in the field of psychometric testing.

So Myers apprenticed herself to Edward N. Hay, who was then personnel manager for a large Philadelphia bank and went on to start one of the first successful personnel consulting firms in the U.S. From Hay, Myers learned test construction, scoring, validation, and statistics. In 1942, the "Briggs-Myers Type Indicator” was created, and the Briggs Myers Type Indicator Handbook was published in 1944. The indicator changed its name to the modern form (Myers-Briggs Type Indicator) in 1956.

Myers’ work attracted the attention of Henry Chauncey, head of the Educational Testing Service, and under these auspices, the first MBTI Manual was published in 1962. The MBTI received further support from Donald T. McKinnon, head of the Institute of Personality Research at the University of California; Harold Grant, professor at Michigan State and
Auburn Universities; and Mary H. McCaulley of the University of Florida. The publication of the MBTI was transferred to Consulting Psychologists Press in 1975, and the Center for Applications of Psychological Type (CAPT) was founded as a research laboratory. After Myers’ death in May 1980, Mary McCaulley updated the MBTI Manual, and the second edition was published in 1985. The third edition appeared in 1998.

Differences from Jung

Judgment vs. perception

The most notable addition of Myers and Briggs to Jung’s original thought is their concept that a given type’s fourth letter (J or P) is determined by how that type interacts with the external world, rather than by the type’s dominant function. The difference becomes evident when assessing the cognitive functions of introverts: 21-22.

To Jung, a type with dominant introverted thinking, for example, would be considered rational (judging) because the decision-making function is dominant. To Myers, however, that same type would be irrational (perceiving) because the individual uses an information-gathering function (either extraverted intuition or extraverted sensing) when interacting with the outer world.

Orientation of the tertiary function

Jung theorized that the dominant function acts alone in its preferred world: exterior for the extraverts, and interior for the introverts. The remaining three functions, he suggested, operate together in the opposite world. If the dominant cognitive function is introverted, the other functions are extraverted, and vice versa. The MBTI Manual summarizes references in Jung’s work to the balance in psychological type as follows:

There are several references in Jung’s writing to the three remaining functions having an opposite attitudinal character. For example, in writing about introverts with thinking dominant... Jung commented that the counterbalancing functions have an extraverted character.

However, many MBTI practitioners hold that the tertiary function is oriented in the same direction as the dominant function. Using the INTP type as an example, the orientation would be as follows:

- Dominant introverted thinking
- Auxiliary extraverted intuition
- Tertiary introverted sensing
- Inferior extraverted feeling

From a theoretical perspective, noted psychologist H.J. Eysenck calls the MBTI a moderately successful quantification of Jung’s original principles as outlined in
Psychological Types. However, both models remain theory, with no controlled scientific studies supporting either Jung's original concept of type or the Myers-Briggs variation.

Applications

The indicator is frequently used in the areas of pedagogy, career counseling, team building, group dynamics, professional development, marketing, family business, leadership training, executive coaching, life coaching, personal development, marriage counseling, and workers’ compensation claims.

Format and administration

The current North American English version of the MBTI Step I includes 93 forced-choice questions (there are 88 in the European English version). Forced-choice means that the individual has to choose only one of two possible answers to each question. The choices are a mixture of word pairs and short statements. Choices are not literal opposites but chosen to reflect opposite preferences on the same dichotomy. Participants may skip questions if they feel they are unable to choose.

Using psychometric techniques, such as item response theory, the MBTI will then be scored and will attempt to identify the preference, and clarity of preference, in each dichotomy. After taking the MBTI, participants are usually asked to complete a Best Fit exercise (see below) and then given a readout of their Reported Type, which will usually include a bar graph and number to show how clear they were about each preference when they completed the questionnaire.

During the early development of the MBTI thousands of items were used. Most were eventually discarded because they did not have high midpoint discrimination, meaning the results of that one item did not, on average, move an individual score away from the midpoint. Using only items with high midpoint discrimination allows the MBTI to have fewer items on it but still provide as much statistical information as other instruments with many more items with lower midpoint discrimination. The MBTI requires five points one way or another to indicate a clear preference.

Additional formats

Isabel Myers had noted that people of any given type shared differences as well as similarities. At the time of her death, she was developing a more in-depth method of measuring how people express and experience their individual type pattern.

In 1987, an advanced scoring system was developed for the MBTI. From this was developed the Type Differentiation Indicator (TDI) (Saunders, 1989) which is a scoring system for the longer MBTI, Form J, which includes the 290 items written by Myers that had survived her previous item analyses. It yields 20 subscales (five under each of the four dichotomous preference scales), plus seven additional subscales for a new Comfort-Discomfort factor (which purportedly corresponds to the missing factor of Neuroticism).
This factor’s scales indicate a sense of overall comfort and confidence versus discomfort and anxiety: guarded-optimistic, defiant-compliant, carefree-worried, decisive-ambivalent, intrepid-inhibited, leader-follower, and proactive-distractible. Also included is a composite of these called "strain." Each of these comfort-discomfort subscales also loads onto one of the four type dimensions, for example, proactive-distractible is also a judging-perceiving subscale. There are also scales for type-scale consistency and comfort-scale consistency. Reliability of 23 of the 27 TDI subscales is greater than 0.50, "an acceptable result given the brevity of the subscales" (Saunders, 1989).

In 1989, a scoring system was developed for only the 20 subscales for the original four dichotomies. This was initially known as Form K, or the Expanded Analysis Report (EAR). This tool is now called the MBTI Step II. Form J or the TDI became known as Step III. It was developed in a joint project involving the following organizations: CPP, the publisher of the whole family of MBTI works; CAPT (Center for Applications of Psychological Type), which holds all of Myers’ and McCaulley’s original work; and the MBTI Trust, headed by Katharine and Peter Myers. Step III was advertised as addressing type development and the use of perception and judgment by respondents.

Precepts and ethics

The following precepts are generally used in the ethical administration of the Myers-Briggs Type Indicator:

Type not trait
The MBTI sorts for type; it does not indicate the strength of ability. The questionnaire allows the clarity of a preference to be ascertained (Bill clearly prefers introversion), but not the strength of preference (Jane strongly prefers extraversion) or degree of aptitude (Harry is good at thinking). In this sense, it differs from trait-based tools such as 16PF. Type preferences are polar opposites: a precept of MBTI is that people fundamentally prefer one thing over the other, not a bit of both.

Own best judge
Individuals are considered the best judge of their own type. While the MBTI questionnaire provides a Reported Type, this is considered only an indication of their probable overall Type. A Best Fit Process is usually used to allow respondents to develop their understanding of the four dichotomies, to form their own hypothesis as to their overall Type, and to compare this against the Reported Type. In more than 20% of cases, the hypothesis and the Reported Type differ in one or more dichotomies. Using the clarity of each preference, any potential for bias in the report, and often, a comparison of two or more whole Types may then help respondents determine their own Best Fit.

No right or wrong
No preference or total type is considered better or worse than another. They are all Gifts Differing, as emphasized by the title of Isabel Briggs Myers’ book on this subject.
Voluntary
It is considered unethical to compel anyone to take the Myers-Briggs Type Indicator. It should always be taken voluntarily.

Confidentiality
The result of the MBTI Reported and Best Fit type are confidential between the individual and administrator and, ethically, not for disclosure without permission.

Not for selection
The results of the assessment should not be used to "label, evaluate, or limit the respondent in any way" (emphasis original). Since all types are valuable, and the MBTI measures preferences rather than aptitude, the MBTI is not considered a proper instrument for purposes of employment selection. Many professions contain highly competent individuals of different types with complementary preferences.

Importance of proper feedback
Individuals should always be given detailed feedback from a trained administrator and an opportunity to undertake a Best Fit exercise to check against their Reported Type. This feedback can be given in person or, where this is not practical, by telephone or electronically.

Type dynamics and development

The Sixteen Types

US Population Breakdown

<table>
<thead>
<tr>
<th>ISTI</th>
<th>ISFI</th>
<th>INFI</th>
<th>INTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>11–14%</td>
<td>9–14%</td>
<td>1–3%</td>
<td>2–4%</td>
</tr>
<tr>
<td>ISTOP</td>
<td>4–6%</td>
<td>ISFP</td>
<td>INFP</td>
</tr>
<tr>
<td>5–9%</td>
<td>4–5%</td>
<td>INTP</td>
<td>3–5%</td>
</tr>
<tr>
<td>ESTP</td>
<td>4–5%</td>
<td>ESFP</td>
<td>ENFP</td>
</tr>
<tr>
<td>4–9%</td>
<td>6–8%</td>
<td>ENTP</td>
<td>2–5%</td>
</tr>
<tr>
<td>ESTI</td>
<td>8–12%</td>
<td>ESFI</td>
<td>ENFI</td>
</tr>
<tr>
<td>9–13%</td>
<td>2–5%</td>
<td>ENTI</td>
<td>2–5%</td>
</tr>
</tbody>
</table>

Estimated percentages of the 16 types in the U.S. population.

The interaction of two, three, or four preferences is known as type dynamics. Although type dynamics has garnered little or no empirical support to substantiate its viability as a scientific theory, Myers and Briggs asserted that for each of the 16 four-preference types, one function is the most dominant and is likely to be evident earliest in life. A secondary or auxiliary function typically becomes more evident (differentiated) during teenage years.

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and provides balance to the dominant. In normal development, individuals tend to become more fluent with a third, tertiary function during mid life, while the fourth, inferior function remains least consciously developed. The inferior function is often considered to be more associated with the unconscious, being most evident in situations such as high stress (sometimes referred to as being in the grip of the inferior function).

The sequence of differentiation of dominant, auxiliary, and tertiary functions through life is termed type development. Note that this is an idealized sequence that may be disrupted by major life events.

The dynamic sequence of functions and their attitudes can be determined in the following way:

- The overall lifestyle preference (J-P) determines whether the judging (T-F) or perceiving (S-N) preference is most evident in the outside world; i.e., which function has an extraverted attitude
- The attitude preference (E-I) determines whether the extraverted function is dominant or auxiliary
- For those with an overall preference for extraversion, the function with the extraverted attitude will be the dominant function. For example, for an ESTJ type the dominant function is the judging function, thinking, and this is experienced with an extraverted attitude. This is notated as a dominant Te. For an ESTP, the dominant function is the perceiving function, sensing, notated as a dominant Se.
- The Auxiliary function for extraverts is the secondary preference of the judging or perceiving functions, and it is experienced with an introverted attitude: for example, the auxiliary function for ESTJ is introverted sensing (Si) and the auxiliary for ESTP is introverted thinking (Ti).
- For those with an overall preference for introversion, the function with the extraverted attitude is the auxiliary; the dominant is the other function in the main four letter preference. So the dominant function for ISTJ is introverted sensing (Si) with the auxiliary (supporting) function being extraverted thinking (Te).
- The Tertiary function is the opposite preference from the Auxiliary. For example, if the Auxiliary is thinking then the Tertiary would be feeling. The attitude of the Tertiary is the subject of some debate and therefore is not normally indicated; i.e. if the Auxiliary was Te then the Tertiary would be F (not Fe or Fi)
- The Inferior function is the opposite preference and attitude from the Dominant, so for an ESTJ with dominant Te the Inferior would be Fi.

Note that for extraverts, the dominant function is the one most evident in the external world. For introverts, however, it is the auxiliary function that is most evident externally, as their dominant function relates to the interior world.

Some examples of whole types may clarify this further. Taking the ESTJ example above:

- Extraverted function is a judging function (T-F) because of the overall J preference
- Extraverted function is dominant because of overall E preference
- Dominant function is therefore extraverted thinking (Te)
- Auxiliary function is the preferred perceiving function: introverted sensing (Si)
- Tertiary function is the opposite of the Auxiliary: intuition
- Inferior function is the opposite of the Dominant: introverted feeling (Fi)

The dynamics of the ESTJ are found in the primary combination of extraverted thinking as their dominant function and introverted sensing as their auxiliary function: the dominant tendency of ESTJs to order their environment, to set clear boundaries, to clarify roles and timetables, and to direct the activities around them is supported by their facility for using past experience in an ordered and systematic way to help organize themselves and others. For instance, ESTJs may enjoy planning trips for groups of people to achieve some goal or to perform some culturally uplifting function. Because of their ease in directing others and their facility in managing their own time, they engage all the resources at their disposal to achieve their goals. However, under prolonged stress or sudden trauma, ESTJs may overuse their extraverted thinking function and fall into the grip of their inferior function, introverted feeling. Although the ESTJ can seem insensitive to the feelings of others in their normal activities, under tremendous stress, they can suddenly express feelings of being unappreciated or wounded by insensitivity.

**Looking at the diametrically opposite four-letter type, INFP:**

- Extraverted function is a perceiving function (S-N) because of the P preference
- Introverted function is dominant because of the I preference
- Dominant function is therefore introverted feeling (Fi)
- Auxiliary function is extraverted intuition (Ne)
- Tertiary function is the opposite of the Auxiliary: sensing
- Inferior function is the opposite of the Dominant: extraverted thinking (Te)

The dynamics of the INFP rest on the fundamental correspondence of introverted feeling and extraverted intuition. The dominant tendency of the INFP is toward building a rich internal framework of values and toward championing human rights. They often devote themselves behind the scenes to causes such as civil rights or saving the environment. Since they tend to avoid the limelight, postpone decisions, and maintain a reserved posture, they are rarely found in executive-director type positions of the organizations that serve those causes. Normally, the INFP dislikes being "in charge" of things. When not under stress, the INFP radiates a pleasant and sympathetic demeanor; but under extreme stress, they can suddenly become rigid and directive, exerting their extraverted thinking erratically.

Every type, and its opposite, is the expression of these interactions, which give each type its unique, recognizable signature.

**Correlations to other instruments**

**Keirsey Temperaments**
David W. Keirsey mapped four 'temperaments' to the existing Myers-Briggs system groupings SP, SJ, NF and NT; this often results in confusion of the two theories. However, the Keirsey Temperament Sorter is not directly associated with the official Myers-Briggs Type Indicator.

<table>
<thead>
<tr>
<th>ISTJ</th>
<th>ISFJ</th>
<th>INFJ</th>
<th>INTJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspector</td>
<td>Protector</td>
<td>Counselor</td>
<td>Mastermind</td>
</tr>
<tr>
<td>IS TP</td>
<td>IS FP</td>
<td>IN FP</td>
<td>IN TP</td>
</tr>
<tr>
<td>Crafter</td>
<td>Composer</td>
<td>Healer</td>
<td>Architect</td>
</tr>
<tr>
<td>ES TP</td>
<td>ES FP</td>
<td>EN FP</td>
<td>EN TP</td>
</tr>
<tr>
<td>Promoter</td>
<td>Performer</td>
<td>Champion</td>
<td>Inventor</td>
</tr>
<tr>
<td>ESTJ</td>
<td>ESFJ</td>
<td>ENFJ</td>
<td>ENTJ</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Provider</td>
<td>Teacher</td>
<td>Fieldmarshal</td>
</tr>
</tbody>
</table>

**Big Five**

McCrae and Costa present correlations between the MBTI scales and the Big Five personality construct, which is a conglomeration of characteristics found in nearly all personality and psychological tests. The five personality characteristics are extraversion, openness, agreeableness, conscientiousness, and emotional stability (or neuroticism). The following study is based on the results from 267 men followed as part of a longitudinal study of aging. (Similar results were obtained with 201 women.)

<table>
<thead>
<tr>
<th>Extraversion</th>
<th>Openness</th>
<th>Agreeableness</th>
<th>Conscientiousness</th>
<th>Neuroticism</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-I</td>
<td>-0.74</td>
<td>0.03</td>
<td>-0.03</td>
<td>0.08</td>
</tr>
<tr>
<td>S-N</td>
<td>0.10</td>
<td>0.72</td>
<td>0.04</td>
<td>-0.15</td>
</tr>
<tr>
<td>T-F</td>
<td>0.19</td>
<td>0.02</td>
<td>0.44</td>
<td>-0.15</td>
</tr>
<tr>
<td>J-P</td>
<td>0.15</td>
<td>0.30</td>
<td>-0.06</td>
<td>-0.49</td>
</tr>
</tbody>
</table>

The closer the number is to 1.0 or -1.0, the higher the degree of correlation.

These data suggest that four of the MBTI scales are related to the Big Five personality traits. These correlations show that E-I and S-N are strongly related to extraversion and openness respectively, while T-F and J-P are moderately related to agreeableness and conscientiousness respectively. The emotional stability dimension of the Big Five is largely absent from the original MBTI (though the TDI, discussed above, has addressed that dimension).

These findings led McCrae and Costa, the formulators of the Five Factor Model (a Big Five theory), to conclude, "correlational analyses showed that the four MBTI indices did measure aspects of four of the five major dimensions of normal personality. The five-factor model provides an alternative basis for interpreting MBTI findings within a broader, more commonly shared conceptual framework." However, "there was no support for the view that the MBTI measures truly dichotomous preferences or qualitatively distinct types, instead, the instrument measures four relatively independent dimensions."
Origins of the theory

Jung’s theory of psychological type, as published in his 1921 book, was not tested through controlled scientific studies. Jung’s methods primarily included clinical observation, introspection and anecdote—methods that are largely regarded as inconclusive by the modern field of psychology.

Jung’s type theory introduced a sequence of four cognitive functions (thinking, feeling, sensing, and intuition), each having one of two orientations (extraverted or introverted), for a total of eight functions. The Myers-Briggs theory is based on these eight functions, although with some differences in expression (see Differences from Jung above). However, neither the Myers-Briggs nor the Jungian models offer any scientific, experimental proof to support the existence, the sequence, the orientation, or the manifestation of these functions.

Validity

The statistical validity of the MBTI as a psychometric instrument has been the subject of criticism. It has been estimated that between a third and a half of the published material on the MBTI has been produced for conferences of the Center for the Application of Psychological Type (which provides training in the MBTI) or as papers in the Journal of Psychological Type (which is edited by Myers-Briggs advocates). It has been argued that this reflects a lack of critical scrutiny.

For example, some researchers expected that scores would show a bimodal distribution with peaks near the ends of the scales, but found that scores on the individual subscales were actually distributed in a centrally peaked manner similar to a normal distribution. A cut-off exists at the center of the subscale such that a score on one side is classified as one type, and a score on the other side as the opposite type. This fails to support the concept of type: the norm is for people to lie near the middle of the subscale. Nevertheless, "the absence of bimodal score distributions does not necessarily prove that the 'type'-based approach is incorrect."

In 1991, the National Academy of Sciences committee reviewed data from MBTI research studies and concluded that only the I-E scale has adequate construct validity in terms of showing high correlations with comparable scales of other instruments and low correlations with instruments designed to assess different concepts. In contrast, the S-N and T-F scales show relatively weak validity. The 1991 review committee concluded at the time there was "not sufficient, well-designed research to justify the use of the MBTI in career counseling programs". However, this study also based its measurement of validity on "criterion-related validity (i.e., does the MBTI predict specific outcomes related to interpersonal relations or career success/job performance?)." The ethical guidelines of the MBTI assessment stress that the MBTI type "does not imply excellence, competence, or natural ability, only what is preferred." The 2009 MBTI Form M Manual Supplement states, "An instrument is said to be valid when it measures what it has been designed to measure"
(Ghiselli, Campbell, & Zedeck, 1981; Murphy & Davidshofer, 2005)." Studies have found that the MBTI scores compare favorably to other assessments with respect to evidence of convergent validity, divergent validity, construct validity, internal consistency, and test-retest reliability.

The accuracy of the MBTI depends on honest self-reporting by the person tested.:52-53 Unlike some personality measures, such as the Minnesota Multiphasic Personality Inventory or the Personality Assessment Inventory, the MBTI does not use validity scales to assess exaggerated or socially desirable responses. As a result, individuals motivated to do so can fake their responses, and one study found that the MBTI judgment/perception dimension correlates with the Eysenck Personality Questionnaire lie scale. If respondents "fear they have something to lose, they may answer as they assume they should.":53 However, the MBTI ethical guidelines state, "It is unethical and in many cases illegal to require job applicants to take the Indicator if the results will be used to screen out applicants." The intent of the MBTI is to provide "a framework for understanding individual differences, and ... a dynamic model of individual development".

The terminology of the MBTI has been criticized as being very "vague and general" as to allow any kind of behavior to fit any personality type, which may result in the Forer effect, where individuals give a high rating to a positive description that supposedly applies specifically to them. Others argue that while the MBTI type descriptions are brief, they are also distinctive and precise.:14-15 Some theorists, such as David Keirsey, have expanded on the MBTI descriptions, providing even greater detail. For instance, Keirsey's descriptions of his four temperaments, which he correlated with the sixteen MBTI personality types, show how the temperaments differ in terms of language use, intellectual orientation, educational and vocational interests, social orientation, self image, personal values, social roles, and characteristic hand gestures.:32-207

With regard to factor analysis, one study of 1291 college-aged students found six different factors instead of the four used in the MBTI. In other studies, researchers found that the JP and the SN scales correlate with one another.

**Reliability**

Some researchers have found the reliability of the test to be low. A study found that only 36% of those who took the Myers-Briggs test scored as the same type when retested 9 months later.

One study reports that the MBTI dichotomies exhibit good split-half reliability; however, the dichotomy scores are distributed in a bell curve, and the overall type allocations are less reliable. Also, test-retest reliability is sensitive to the time between tests. Within each dichotomy scale, as measured on Form G, about 83% of categorizations remain the same when individuals are retested within nine months, and around 75% when individuals are retested after nine months. About 50% of people tested within nine months remain the same overall type, and 36% remain the same type after more than nine months. For Form
M (the most current form of the MBTI instrument), the MBTI Manual reports that these scores are higher (p. 163, Table 8.6).

In one study, when people were asked to compare their preferred type to that assigned by the MBTI assessment, only half of people picked the same profile. Critics also argue that the MBTI lacks falsifiability, which can cause confirmation bias in the interpretation of results.

Utility

In her research, Isabel Myers found that the proportion of different personality types varied by choice of career or course of study.40-51 However, some researchers examining the proportions of each type within varying professions report that the proportion of MBTI types within each occupation is close to that within a random sample of the population. Some researchers have expressed reservations about the relevance of type to job satisfaction, as well as concerns about the potential misuse of the instrument in labeling individuals.

Studies suggest that the MBTI is not a useful predictor of job performance. As noted above under Precepts and ethics, the MBTI measures preference, not ability. The use of the MBTI as a predictor of job success is expressly discouraged in the Manual.78 It is not designed for this purpose.

Behavioristic Approach to Personality

Behaviorists explain personality in terms of the effects external stimuli have on behavior. It was a radical shift away from Freudian philosophy. This school of thought was developed by B. F. Skinner who put forth a model which emphasized the mutual interaction of the person or "the organism" with its environment. Skinner believed children do bad things because the behavior obtains attention that serves as a reinforcer. For example: a child cries because the child’s crying in the past has led to attention. These are the response, and consequences. The response is the child crying, and the attention that child gets is the reinforcing consequence. According to this theory, people’s behavior is formed by processes such as operant conditioning. Skinner put forward a "three term contingency model" which helped promote analysis of behavior based on the "Stimulus - Response - Consequence Model" in which the critical question is: "Under which circumstances or antecedent 'stimuli' does the organism engage in a particular behavior or 'response', which in turn produces a particular 'consequence'?'"

Richard Herrnstein extended this theory by accounting for attitudes and traits. An attitude develops as the response strength (the tendency to respond) in the presence of a group of stimuli become stable. Rather than describing conditionable traits in non-behavioral language, response strength in a given situation accounts for the environmental portion. Herrnstein also saw traits as having a large genetic or biological component as do most modern behaviorists.
Ivan Pavlov is another notable influence. He is well known for his classical conditioning experiments involving dogs. These physiological studies led him to discover the foundation of behaviorism as well as classical conditioning.

**B.F. Skinner: Operant Conditioning and Human Behavior**

Classical, or Pavlovian, conditioning is a process by which new emotional and glandular reactions develop in response to previously neutral stimuli in the environment. But classical conditioning doesn't explain how we develop new skills or behaviors instrumental in changing our external environments. That learning process involves what is typically referred to as instrumental, or operant, conditioning. Operant conditioning describes how we develop behaviors that "operate upon the environment" to bring about behavioral consequences in that environment. Operant conditioning applies many techniques and procedures first investigated by E. L. Thorndike (1898) but later refined and extended by B. F. Skinner (Skinner, 1938).

Thorndike was an American psychologist who was one of the first to investigate the effects of behavioral consequences on learning. His work led him to emphasize both the effects of positive as well as negative behavioral consequences. Because behaviors are instrumental in bringing about such consequences by operating upon the environment in some way, this process for developing new skilled behaviors was first called instrumental conditioning. In subsequent literatures, especially in those inspired by the work of Skinner, the term "instrumental conditioning" was replaced by the term "operant conditioning." Nevertheless it was Thorndike who first concluded that positive consequences strengthen behaviors to make them more likely in similar situations in the future; a phenomenon he labeled the Law of Effect.

Inspired by the much earlier work of both Pavlov and Thorndike, another American Psychologist, B.F. Skinner, went on to develop the principles of operant conditioning. Skinner formalized these principles and identified many variables involved in this form of learning. For example, Skinner revised Thorndike’s concept of “reward” by emphasizing that it has "positive reinforcement" effects which result in the increased likelihood of a behavior's future occurrences. Even painful consequences can increase the future likelihood of behaviors that eliminate or avoid such consequences, and thus Skinner emphasized their function as "negative reinforcements." According to Skinner, reinforcement, whether positive or negative, is the process of increasing future behavioral probabilities; meaning any response that is followed by a reinforcer will increase in its frequency of occurrence across time (a concept emphasizing the rate of specific ways of behaving). Skinner also discovered that such reinforcing events don’t have to happen each and every time. Instead, intermittent reinforcement is also effective, and Skinner described the effects that different "schedules" of reinforcement (the timing or frequency of reinforcement) have on behavior. He also identified the process of punishment whereby behavioral probabilities may be decreased by consequences. Any behavior that is followed by punishment decreases in frequency.
Using the variables controlling operant conditioning as a foundation, B.F. Skinner also investigated several alternative operant procedures. For example, shaping (Peterson, n.d.) is a process of operantly conditioning a new form of behavior by reinforcing successive approximations to the ultimately desired form of behavior, known as the “target” behavior. Shaping is simply a method for conditioning an organism to perform a new behavior by reinforcing small and gradual steps toward the desired form of behavior. The experimenter starts the shaping process by reinforcing what the individual already does, then by gradually reinforcing only selective variations of that behavior that lead to the form of the target behavior, the experiment may gradually reach the point where only the target behavior is the one reinforced.

Behaviors come to occur only within certain antecedent environmental circumstances through a process called stimulus discrimination conditioning, and this process was also investigated in detail by Skinner. Both stimulus discrimination and generalization exist in classical conditioning processes as well, but we will currently focus only on these processes as they are employed in operant conditioning. Likewise, procedures exist for the extinction of operant behaviors as well as the parallel process of extinction of classically conditioned responses. In operant conditioning, extinction is the process wherein experimenters stop reinforcing or punishing a specific behavior, thus resulting in that behavior’s return to pre-conditioning rates, or probabilities, of occurrence.

Operant conditioning techniques and procedures have many applications across various circumstances and problem areas. They have been utilized in the classroom environment with a great deal of success. Early forms of teaching machines first elaborated by Skinner have evolved into today’s computer-assisted instruction programs. Such programs allow students to receive feedback on their progress in mastering various types of subject matter while simultaneously shaping students to become more skilled in more generalized behaviors such as reading comprehension (Ray, 2004). Appropriate and learning-supportive classroom behaviors may also be developed and maintained with operant principles. In a process called the token economy, students are rewarded for good classroom behaviors or even independent study management programs using points or tokens that may be traded for more primary forms of reinforcement. Token economies are also used in psychiatric hospitals and other institutions to maintain and teach appropriate and adaptive behaviors (Ayllon & Azrin, 1968).

Operant conditioning also has made significant contributions in therapeutic settings. For example, anxiety and other similar physiological disorders can be treated with a technique known as biofeedback. Many of the earliest demonstrations of biofeedback came from Neal Miller’s laboratory (Miller, 1969), and typically involved the monitoring of a patient’s vital body functions (heart and breathing rate, blood pressure, etc.) while also displaying their status via some type of feedback device, such as a computer display. Patients may be trained to relax or otherwise behave in ways that keep their vital physiological processes within a more healthy range of functioning. Feedback telling individuals that they are being successful reinforces their efforts to control their own physiological functions. Patients may, for example, wear portable monitoring and feedback devices to learn to relax in usually anxiety provoking situations.
Procedures like shaping and chaining are also applied in the training of performance animals, in obedience classes for family pet, and in the training of animals as personal assistants for blind or paralyzed humans (Pryor, 1985). Performance animals like these, as well as the ones seen in marine parks and circuses, learn complex chains of behaviors through operant conditioning procedures involving reinforcement and antecedent stimulus discrimination. For example dogs in obedience classes are taught to behave to simple commands that offer visual and auditory cues antecedent to desired behaviors as well as positive reinforcement as consequences for performing those behaviors in response to those cues.

**Origins of Operant Conditioning: Instrumental Learning and the Law of Effect**

Edward Lee Thorndike was an American psychologist studying animal learning while a graduate student at Harvard University in the late 1890's. He was especially interested in how animals learn to engage in new behaviors that are instrumental in solving problems, such as escaping from a confined space. The instrumental character of behavior in changing an animals' circumstances led subsequent authors to refer to Thorndike's form of learning as instrumental learning, although Thorndike preferred to describe it as "trial and success" learning (Chance, 1999). Pretty much these same behavioral processes were renamed operant conditioning by a much later researcher, B.F. Skinner (Skinner, 1938), who was also interested in how such skills "operate upon environments" (hence his more descriptive term "operant") to bring about significant consequences for the individual.

Thorndike designed many ingenious experiments into study such behavior. In one series of investigations Thorndike placed hungry cats into an apparatus called a puzzle box, from which the animals learned to escape to obtain rewards of food. At first Thorndike’s cats seemed to behave almost randomly, using trial and error to find their way out of the puzzle box. Thorndike graphed the time it took an animal to escape from the puzzle box for each successive trial he gave the animal. He quickly discovered that the time for escape gradually declined over several repeated trials, with each successive trial typically taking less and less time. He called this a learning curve and proposed that the slope of this curve reflected the rate at which learning occurred (Chance, 1999). From such studies Thorndike proposed his Law of Effect, which states that if successful behaviors in a trial and error situation are followed by pleasurable consequences, those behaviors become strengthened, or "stamped in" and will thus be more quickly performed in future trials (Thorndike, 1898).

As noted above, in order to study the problem-solving behavior of cats using trial and error procedures Thorndike developed a special puzzle box apparatus. Various forms of puzzle boxes were constructed, but a typical one was a wooden cage equipped with a door held by a weighted loop of string holding, and a pedal, and a bar. A cat had to press the pedal, pull the string, then push the bar to unlatch the door to the box. This allowed the animal to then escape from the box and obtain food as a consequence.
The term instrumental conditioning is used to describe Thorndike's procedures for animal learning because the term ties behaviors to the generation of their consequences in learning—that is, the behavior is instrumental in obtaining important consequential outcomes in the environment. Thorndike's procedures involved what many refer to as "trial and error" procedures. For example, when Thorndike placed a hungry cat into a puzzle box, the cat would produce many behaviors in an attempt to escape the confinement. Eventually, the animal would produce the correct behavior quite by chance, usually clawing a string and then stepping on a pedal to open the door. This correct behavior had consequences because Thorndike would leave a plate of food just outside the box that the cat would eat from once it escaped. Thorndike's Law of Effect proposed that such rewards strengthened the behaviors that obtained the reward, thus making that behavior more quickly performed with fewer errors on future trials.

Thorndike's Law of Effect took two forms: the "strong" form and the "weak" form. Food as consequences represented the strong, or behavioral strengthening, form. The "weak" side of the Law of Effect describes what happens when a behavior fails to accomplish such pleasurable consequences, thus leading to a weakened, or "stamped out" impulse to behave in a similar fashion in similar situations in the future. Thorndike's studies were among the first to demonstrate and precisely measure the power of consequences in the environment (especially rewards) and their ability to control behavior, and thus Thorndike's work laid the foundation for the subsequent development of a more behavioral perspective on the learning process.

**Operant Conditioning Principles**

Another American Psychologist working at Harvard, B. F. Skinner, also studied the behavior of animals with a focus on consequences. Although Skinner's work came much later than that of Thorndike (Skinner began his work on operant conditioning in the 1930s), his research was based on the principles Thorndike had identified. Skinner (1938) believed that in order to understand psychology you had to focus only on observable behaviors.

Because observable behaviors and the role environments play in developing and controlling those behaviors are the focus of operant conditioning, Skinner and the field of operant conditioning is often considered to represent the most radical form of the perspective on learning called "behaviorism." Thorndike's work anticipates this movement as well, but Thorndike predated the philosophical emphasis on observable behaviors as the exclusive outcomes in learning. Throughout our discussion of operant conditioning, you will read terms such as "behavioral," "behaviorism," and "behaviorist." These terms typically refer to the work of Pavlov and Thorndike as the foundations of the perspective, but it was John Watson (1913) who described the perspective in most detail, and Skinner (1938) who most completely illustrated the power of the approach in what he called "radical behaviorism". These researchers emphasized the importance of observable behavior in understanding psychology and generally excluded mental activities in their studies. Because of this focus on behavior, their work is deemed "behavioral" and their conceptualization of learning is labeled "behaviorism." Keep in mind that this term does not include the cognitive or ecological perspectives.
Through his research, Skinner's radical behaviorism (1938) identified variables and formalized procedures using those variables in a conceptualization to learning called "operant conditioning." This term comes from Skinner's emphasis on the fact that behaviors operate (thus being an "operant") on the environment in order to gain certain consequential stimuli and to avoid others. Unlike classical conditioning, which Skinner called Respondent Conditioning because it focuses on the processes of learning in reflexive responses, operant conditioning focuses on how organisms learn totally new behaviors through experience with consequences in the environment. Skinner’s operant conditioning is founded on Thorndikes' instrumental conditioning, but Operant Conditioning involves a wider variety of processes and labels consequences quite differently.

Skinner used rats as subjects for much of his work, but he is even more famous for his later work with pigeons. Dissatisfied with mazes or Thorndike's puzzle box, Skinner designed an apparatus to study animal behavior in a slightly different fashion. The operant chamber, or Skinner box as it came to be known, was designed to prevent human interruption of the experimental session and to allow the study of behavior as a continuous process, rather than in separated trial-by-trial procedures.

In Thorndike’s puzzle box, the animal would have to be physically placed back into the box after each rewarded escape trial. Skinner felt that such procedures interfere with behavior as a "stream of events". For rats an operant chamber has a lever (technically called an operandum) that can be pressed over and over to deliver food pellets, with each press counting as a single occurrence of the behavior. For pigeons, one or more disks can be pecked as the operands to deliver reinforcement for this behavior, usually in the form of food grain. The disks are often lighted for stimulus discrimination and generalization training. After an animal receives a reinforcement for pressing a bar or pecking a disk, there is no need to reset the system; the chamber is ready to deliver more reinforcements as soon as the animal responds again.

The cumulative recorder was another innovation introduced by Skinner to automatically graph response rates (that is, it shows an accumulation of the number of total responses as this total is distributed across time). In its original form, this machine recorded the number and timing of an operant behavior by using a continuously rolling piece of paper with a fixed ink-pen to mark time across a continuous X axis, as well as another pen that advanced one step up the Y axis each time a bar was pressed or key was pecked. Skinner was able to study animal behavior for as long as he deemed necessary without ever having to interfere with or even observe his animal.

Almost all of what Skinner (1938) discovered about operant conditioning principles came from his use of the operant conditioning chamber and its cumulative recorder-produced data. One procedure and its associated variables that Skinner identified was that of reinforcement. According to Skinner reinforcement involves the presentation or removal of stimulus consequences that increase the future rate of any specific class of operant behaviors, such as bar pressing or key pecking. The consequential stimulus variable is
considered to be a reinforcer only if it's presentation or removal as a consequence for a behavior increases the future rate or probability of that form of behavior.

Skinner felt that when the presentation of a stimulus results in an increase in behavioral probability, positive reinforcement has occurred. Skinner also identified two types of positive reinforcers; primary (usually biological) and secondary or conditioned (must be classically conditioned to acquire reinforcing functions like the primary stimulus has). When the removal of a stimulus as a consequence for a behavior increases the likelihood of that form of behavior, negative reinforcement has occurred. Escape and avoidance learning are how we often describe changes in behavior rates that increase because of negative reinforcement.

Skinner also studied the procedure of punishment. Punishment is the opposite of reinforcement. It occurs when the probability of a behavior decreases with the presentation or removal of a stimulus. If presentation of an aversive stimulus decreases the likelihood of behavior occurring again, positive punishment has taken place. If the removal of a positively valued stimulus decreases the chances that a behavior will occur again, negative punishment, also called time out, has occurred. Skinner noted that punishment is often an inefficient way of controlling behavior, and in order to work at all it must be applied immediately after the behavior, it must be consistent and follow after every instance of the behavior, and it must be fairly strong.

So Skinner (1938) developed his procedures for operant conditioning through the manipulation of the operant variables of reinforcing and punishing consequences. But Skinner noticed that when he presented a reinforcement every time a behavior occurred, the rat or pigeon would become satiated quickly and would stop producing a certain behavior in high rates. Skinner labeled this procedure continuous reinforcement. Eventually he tried reinforcing behaviors using a non-continuous procedure -- a process he called partial, or intermittent, reinforcement. There are several types of partial reinforcement, each with different rules for applying one or another of type of consequences (reinforcements or punishments). These rules for "scheduling" reinforcement intermittently either rely on counting behaviors, such as fixed or variable ratio rules, or adding a time interval to the behavioral rule, such as fixed or variable interval schedules. Each type of schedule rule effects behavior in different and unique ways.

Skinner was also one of the first to seriously consider a fundamental flaw in Thorndike's trial and error learning procedure. Instead of using Thorndike's vocabulary which described an animal as random "trying" to solve a problem, Skinner preferred to talk about different activities as alternative forms of emitted behaviors. And all responses or behaviors that look alike or act upon the environment in a similar fashion form a "class" of related emitted responses, or an "operant class" of behavior. This contrasts with Pavlov's elicited behaviors, such as salivation, where known unconditional stimuli are used to bring about the "respondent" behaviors, as Skinner referred to them. But what if the animal never emits the correct behavior in a trial and error situation? Having made only errors,
nothing could be reinforced and thus no learning (relatively permanent change in behavior) would take place either.

Skinner believed that by manipulating consequences in a certain systematic way, an organism could be led to the correct behavior much faster than if one simply waited for the animal to happen upon the response by chance. The procedure he developed for accomplishing this step-by-step process is called shaping, and it’s purpose it to reinforce behavior in gradual steps that begin with only rough approximations to the eventual “target” that one has as the goal of learning. In Skinner’s research a behavior he often shaped was a lever press by a rat in an operant chamber (Skinner, 1951; Peterson, n.d.). He would first reinforce the animal for being in the vicinity of the bar, then for sniffing the bar, then touching the bar with a paw, then standing over the bar and eventually pressing the bar, all in successive approximations or gradual steps to the final bar pressing he wanted the animal to learn. Chaining is yet another procedure that is based on shaping, but it is used to condition a whole complex series of different responses, not just one.

Extinction, stimulus discrimination and stimulus generalization also exist in operant conditioning just as in classical conditioning. Extinction occurs when reinforcement or punishment no longer occurs as a consequence for a given behavior. Spontaneous recovery can also occur in operant conditioning if extinction is tested again later, and rapid reacquisition occurs if reinforcement or punishment is again the consequence for behavior. Stimulus discrimination involves presenting reinforcement or punishment only under certain antecedent stimulus conditions and not others until the organism only produces the behavior under the given antecedent settings. Generalization is the opposite: reinforcement or punishment is the consequence of behavior in many antecedent settings and the organism produces the behavior across these many different circumstances. The procedures developed by Skinner have been tested in many different applied settings and are very commonly used today.

Reinforcement in Operant Conditioning

Thorndike’s studies of instrumental learning where cats learned to escape from puzzle boxes led to his conclusion that behaviors are controlled by their consequences, which was stated as his Law of Effect (Thorndike, 1898). In his studies of operant conditioning Skinner (1938) also stressed the importance of behavioral consequences, which he referred to as reinforcement and punishment. Reinforcement occurs when the probability of a certain behavior increases due to the presentation of a stimulus as a behavioral consequence (positive reinforcement) or the removal of a stimulus as a behavioral consequence (negative reinforcement).

It is important to keep in mind that reinforcement is a process and occurs only if behavioral probability increases. Thus a consequential stimulus is not a reinforcer if it’s presentation (positive reinforcement) or removal (negative reinforcement) does not increase the likelihood that the behavior will occur again. We often assume that something will reinforce behavior, but until the behavior has shown an increase in probability, you cannot be sure. For instance, you may think candy would reinforce a child for studying, but if the
child doesn’t study more often when given candy upon doing so, candy is not a positive reinforcer.

There are two kinds of positively reinforcing stimuli (stimuli that are generally reinforcing when presented to an individual) known as primary reinforcers and secondary (or conditioned) reinforcers. Both types can be delivered following various rules for delivery, thus defining various schedules of reinforcement. Often some type of procedure, such as deprivation, is required to establish that a certain stimulus will function as an effective reinforcer. According to Skinner (1938), reinforcement is much better at controlling behavior than punishment, which is defined by a decrease in the probability of any behavior that causes the punishing stimulus to be presented (negative punishment) or removed (positive punishment, or time-out).

Another way to positively reinforce behavior is to rely upon Premack’s Principle (Premack, 1959, 1971). According to the Premack Principle, a normally higher frequency behavior can be used to positively reinforce a desired behavior that is normally lower in frequency. A parent is more likely to positively reinforce a child for studying (a low frequency behavior without intervention) by allowing the child to watch TV (a high frequency behavior without intervention) after studying for some specified time. In this case, allowing the consequential behavior of watching TV causes the probability of studying to increase. The Premack Principle has also been utilized in operant conditioning research on rats. Rats can be successfully reinforced for bar pressing (very low frequency behavior without intervention) by allowing the rat to run in a running wheel (normally high frequency behavior in rats).

Skinner (1938) also found that consequences resulting in the removing an aversive (painful, uncomfortable, or undesired) stimulus that was already present could also increase the probability that a certain behavior would occur. He called this process negative reinforcement. Crucial to negative reinforcement is: 1) the pre-existing presence of an aversive stimulus, 2) then a specific form of behavior that 3) has the consequence of terminating or removing that aversive stimulus. A parent who wants to reinforce the studying behavior of the child could use negative reinforcement by removing normally required chores for a week. It is important to remember that negative reinforcement is labeled "negative" because it relies upon the removal of an aversive stimulus, not because it is a "negative" way to reinforce behavior. And it is reinforcement because the behavior that removes the stimulus increases in probability.

Frequent use of negative reinforcement, inside or outside of the laboratory, will lead to what is often referred to as escape and/or avoidance behavior, as when you have an increased probability of taking an aspirin to escape a headache or to avoid developing muscle pain after strenuous exercise. Escape is the first of two phases of behavioral development involving the use of negative reinforcement. Avoidance is the second phase. If the floor of an operant conditioning chamber is electrified to deliver a mild electrical shock, a rat's bar press in the presence of this shock is negatively reinforced when the bar pressing turns off the shock. The rat will always experience the shock, but through negative
reinforcement it learns to escape this aversive stimulus by pressing the lever that terminates the shock.

A child is negatively reinforced for whining about doing chores when someone reduces the time the child spends doing those chores. In this case whining becomes a means for escaping chores. But the child still has to come into contact with the aversive event (chores) before he/she can escape them by whining. As noted above, taking aspirin for a headache is a classic example of escape learning. The reduction or elimination of pain negatively reinforces taking the medicine. The headache must be experienced for this to occur, but the individual escapes the pain through pill taking behavior.

Avoidance is also a term that refers to increasing the likelihood of behaviors by the use of negative reinforcement. Avoidance typically appears as a second phase of development following the phase of escape. If a rat learns to press a lever by escaping a brief shock, eventually that rat begins to press even before the shock is delivered if pressing delays the next onset of shock (i.e., keeps the shock from occurring for a while). In this case, the rat may never again come into contact with shock, but bar pressing continues because it has been negatively reinforced. This is the essence of avoidance learning. A child who’s whining is always reinforced by the removal of chores may learn to avoid doing chores altogether by whining even before starting chores. It would be far better to establish studying as a means by which the child can avoid chores!

Sometimes avoidance learning is facilitated by using some sort of antecedent stimulus signal for the impending shock. If, for example, a light in the chamber signals that a bar press by a rat may prevent the occurrence of an electric shock, the rat’s bar press will be negatively reinforced by the termination of the light (escape behavior). Of course, at the same time the rat must also be avoiding any contact with shock because shock was prevented from coming on by the bar being pressed. After only a few experiences with actual shocks following such a light signal, the rat will learn to prevent shocks altogether by pressing the bar as soon as the light turns on. The bar press is avoidance behavior that is under the control of a discriminative antecedent stimulus (the warning light), and is thus called discriminative avoidance.

Reinforcement is a naturally occurring process, and doesn’t have to be managed by someone. For example, can you think of any superstitions? Many people believe that walking under a ladder will give you bad luck or finding a four-leaf clover will bring you good luck. Well, in operant conditioning, superstitious behavior is a behavior that increases in probability because it happened to be reinforced merely by chance (Skinner, 1948). This happens especially when reinforcement occurs based on rules that are independent of a specific behavior, such as time since last reinforcement, rather than on what behavior was occurring. In pigeons, superstitious behavior may include shaking wings or other unusual behaviors before pecking a disk for reinforcement. The pigeon may have shaken its wings before pecking for food when it was first reinforced. That wing-shaking behavior is said to be superstitious because it has nothing to do with gaining reinforcement, yet it has increased in likelihood none-the-less.
In humans, blowing on dice before rolling them may be a form of superstitious behavior. A gambler may have once blown on a pair of die and then won the jackpot after he/she rolled the right numbers. The gambler may now believe that this blowing behavior led to the winning and will continue to do so on every roll. This behavior is superstitious because blowing on dice has nothing to do with the numbers you roll or the winnings you obtain. This can happen in a punishment situation as well. If blowing on the die resulted in a bad roll and the gambler lost everything, blowing on die will greatly decrease in frequency if it even occurs again. This decrease in behavior is superstitious because again, blowing on the die did not determine the result of the roll or the loss of money.

**Conditioned Reinforcement and Operant Conditioning**

Skinner (1938) described two types of reinforcing stimuli: primary and conditioned (or secondary) reinforcers. A primary reinforcer is anything that has the power to increase behavioral probabilities because it is involved with a biological need of the organism. Food, sex and temperature stabilities are often used as reinforcement because we need them as a species. Escape from pain and social acceptance/contact can also be considered as primary reinforcers due to their evolutionary importance to humans and certain other organisms. Primary reinforcers also provide a powerful source of motivation when an organism is deprived of them.

In operant conditioning, primary reinforcers are often used because of their immediate power to modify behavior. This power comes from the fact that they are of direct biological importance to the organism. Food, water, exercise, and escape from pain can be considered as primary reinforcers because a lack of these can be physiologically harmful and/or painful. Skinner used primary reinforcers, usually food, in most of his laboratory studies with pigeons and rats.

A conditioned or secondary reinforcer is anything that can increase the probability of behavior because of its reliable association with primary reinforcers. Classical (Pavlovian) conditioning is at work here, as can be seen in the case of money. Money can be a powerful reinforcer, although it has no real use to us unless it can buy the things that meet more primary needs, such as food, shelter, and entertaining stimulation. This is classical conditioning with money as the CS and food, etc. as the UCS. A small piece of metal (such as coins) or piece of paper (such as dollar bills) has little value per se, as illustrated by play money. However, food, social contact, relief from pain, and even relief from boredom (all primary reinforcers) can be obtained with a sufficient amount of money that is legal tender for things we need. Therefore, because money has been paired with these primary reinforcers so often, it takes on the power to increase the probability of behavior in and of itself. This is why it is labeled as a secondary, or conditioned, reinforcer.

Skinner’s work illustrated that deprivation is a common procedure for effectively changing the nature of a reinforcer in operant conditioning (Skinner, 1938). Such procedures are described by some researchers as establishing motivation, and are thus referred to as "establishing operations" (Michael, 1982, 1993; Dougher |_2 Hackbert, 2000). A pigeon will not press a lever very frequently for food if it is satiated (full). Depriving the animal of this
primary reinforcer (usually experimental deprivation involves food or water) will motivate
the animal to perform, because now the reinforcer satisfies a biological need. In operant
research, animals are not deprived of food or water to a point that is dangerous or very
distressing (all research with animals must follow strict ethical guidelines in any
discipline). The animals are usually made just hungry or thirsty enough so that food or
water works as an effective primary reinforcer. But almost anyone who has eaten too much
thanksgiving dinner can relate to the fact that food may eventually turn into an aversive
stimulus when too much has been consumed!

Deprivation of a secondary reinforcer, like money, works much in the same way. A person
who has $ 817,000,000 is not going to be highly motivated to work for money. Someone
with only $ 83 to his or her name will do almost any kind of work for money if they have no
other means for eating or staying warm. You may have noted, however, that the person
with only $ 83 is probably also deprived of primary reinforcers (like food, shelter, or social
contact) as well as money. And the person with $ 817,000,000 may work because he/she is
deprived of certain social stimuli that money may not buy.

Punishment in Operant Conditioning

Thorndike’s earliest studies of cats escaping from puzzle boxes led him to distinguish
between two forms of his famous Law of Effect. Thorndike (1898) held that behaviors
could be "stamped in" by satisfying consequences or "stamped out" by annoying
consequences. This became the basis for his distinguishing between a Strong Law of Effect
and his Weak Law of Effect. When behavior is stamped out by annoyers Thorndike felt that
a "strong" Law of Effect was at work. He later withdrew this punishment element of his
theory, eventually leaving only the "weak" Law of Effect that resulted in a "stamping in" of
behavior. His work with human subjects learning verbal behaviors had convinced him that
saying "wrong" had less effect than saying nothing, and the most effective response was
saying "right" to the learner’s responses. Thus Thorndike interpreted these results as
arguing against the effectiveness of punishment (Catania, 1998).

Likewise, in his studies of operant conditioning Skinner (1938) described the phenomenon
of punishment as well as reinforcement. Positive punishment involves a decrease in the
probability of a behavior through presentation of (addition of, and thus the term
"positive") an aversive stimulus as a behavioral consequence. Negative punishment
describes the removal of a positive stimulus as a behavioral consequence. It is worth re-
emphasizing that the stimulus that is presented in positive punishment is usually a painful
or otherwise aversive stimulus, while those stimuli that act as negative (removed)
punishers are usually sought-after or appetitive stimuli. Sound confusing? Then let’s
consider these distinctions in more detail.

As noted, punishment is an operant process of decreasing the probability that a particular
behavior will occur. According to Skinner (1938) a stimulus cannot be considered a
"punisher" if it’s presentation (positive punishment) or removal (negative punishment)
does not decrease the likelihood of a behavior. For instance, it may seem intuitive that
giving extra chores will be a good punishment for a child having drawn on the wall. If,
however, the child continues to draw on the wall with the same frequency despite the extra chores, the chores are not punishers and punishment has not occurred.

It is easy to confuse the use of positive and negative to describe types of punishment. As in the case of positive reinforcement, positive punishment refers to the presentation of a stimulus, only now it decreases behavioral probabilities instead of the increase probability that defines reinforcement. But aversive stimuli are used often in operant conditioning procedures. Anything that causes pain, discomfort, high levels of physical and/or mental stress or anything that is undesired is classified as an aversive stimulus. In successful negative reinforcement, their removal results in an increase in the probability of a certain behavior. In positive punishment, however, the presentation of an aversive stimulus results in the decrease of the probability of a certain behavior. But because the stimulus being presented in positive punishment is usually aversive to, in other words, unpleasant for, the organism, some people are inclined to speak of such aversive stimuli as being negative for attracting/repelling the individual. See the potential for confusion? Positive punishment adds negative stimulus consequences.

As with negative reinforcement, negative punishment involves the removal of a stimulus. In this case, the goal is to decrease the probability of a behavior, so the stimulus removed is a desired, pleasant, or "positive" stimulus. Punishing a teenager for missing a curfew by taking away use of the car for a period of time is an example of negative punishment. It is the time during which the stimulus is not available that negative punishment gets its other, more common, name of "time out." Remember, though, "negative" refers to the removal of some stimulus, it is not a value judgment of this type of punishment.

Punishment is generally not a very effective means of behavior control, but there are several punishment factors that will modify how effective it is for decreasing behavioral probabilities. As Skinner noticed, every behavior serves some purpose for the organism (i.e. some children misbehave for attention) and if you decrease the likelihood of a behavior, it will appear again unless you shape a new behavior that will have the same purpose for the organism. Punishment doesn't make behaviors disappear; it just reduces the likelihood that they will appear. Another issue with the use of punishment is what happens to the status of the punisher. A dog (or a child for that matter) may come to find the person who continually punishes it as itself aversive, and it will avoid the individual as it comes to associate him or her with punishment.

Sometimes, punishment is necessary. However, in order to be effective at all, the following factors in punishment must be present. Punishment must occur immediately after the behavior, it must be strong, but not overwhelming and it must consistently follow every instance of the behavior to be reduced. How many times did you hear "Just wait until your father comes home," after you were caught misbehaving as a child? While this is meant to scare you, the punishment is still a long way off if it even comes at all. This type of behavior control doesn't work, much to the frustration of many mothers. In order for punishment to decrease the occurrence of behavior, it must occur immediately after the inappropriate behavior. Too much delay makes any future punishment random and not tied close enough to the behavior that needs to be decreased.
Punishment must not only be immediate, but also must be strong in order to be effective. Telling a child "Stop that!" when he/she is caught hitting another child will not be enough to decrease the behavior. However, the child does not need to have his/her toys taken away for a week for the transgression either. The punishment must fit the crime. A "time out" of about 5 minutes and a lecture of why hitting is wrong is usually aversive enough to a young child to greatly decrease the behavior. As Skinner noted, punishment should not be strong enough to cause harm, but it should be strong enough to be aversive.

Another very important issue in the effectiveness of punishment is consistency. As Skinner noted in his research, punishing behavior only occasionally is not an efficient way to decrease the likelihood of behavior. A child who is punished for hitting needs to be punished every time he/she is caught doing it, otherwise the punishment does not work to reduce the occurrence of this behavior.

**Operant Conditioning Procedures**

B. F. Skinner's (1938) investigations of operant conditioning introduced a variety of unique experimental procedures as well as demonstrations that various processes observed in Pavlov’s classical conditioning also have counterparts in operant conditioning. Skinner's operant conditioning procedures introduce alternative manipulations of operant conditioning variables, such as antecedent stimuli and reinforcement contingency rules. These various operant procedures include extinction, generalization, discrimination, shaping, chaining, and a variety of different schedules of reinforcement.

The processes of extinction, generalization and discrimination that were discussed in the classical conditioning section have counterparts in operant conditioning. In extinction, reinforcement that has been a reliable consequence of a behavior is no longer presented. That is, the behavior no longer generates reinforcing consequences. Skinner noticed that when a behavior is first put on extinction, the organism displays a burst of the behavior and then begins to produce new, but related, behaviors -- a phenomenon called response induction. But eventually the behavior decreases in frequency to the point that it is very rarely emitted. If an instance of the behavior is reinforced again, however, spontaneous recovery will occur.

The operant procedure of discrimination training requires a stimulus be presented before the behavior even occurs, leading to its description as an antecedent to behavior. This antecedent stimulus serves to "set the occasion" that any lever press occurring in the presence of this antecedent will be reinforced. Experimentally such a stimulus may be auditory (i.e. a tone) or visual (usually a light of a certain color) or any other modality.

Skinner illustrated discrimination by reinforcing a rat’s lever presses in the presence of an antecedent discriminative stimulus (also called an S₃ or Sd) and not in it’s absence (a condition called S⁻ or Sdelta) . Thus behavior in S⁻ is on an extinction schedule in the absence of the discriminative stimulus. Eventually, rats only pressed the lever in the presence of the stimulus, hence completing the discrimination process. Stimulus
discrimination is also used in the process of chaining, where one behavior signals that a different behavior will be subsequently reinforced.

Like stimulus discrimination, stimulus generalization in operant conditioning is only slightly different than its counterpart in classical conditioning. Let's say, for example, that a rat's lever press has been reinforced in the presence of a red light but not the presence of a green light. The rat will come to press only in the presence of the red light, hence demonstrating stimulus discrimination. If a pink or orange light is shown and the rat presses the lever, stimulus generalization has been demonstrated. As an operant conditioning procedure developed by Skinner, stimulus generalization occurs when an organism performs a behavior under antecedent conditions similar to conditions under which it was reinforced.

Schedules of reinforcement involve procedures whereby not every occurrence of a given form of behavior is followed by a reinforcer. Skinner (cf. Ferster |.2 Skinner, 1957) noted that when every instance of a behavior is reinforced, the animal quickly becomes satiated (has enough of the reinforcer that the stimulus loses reinforcing power) and stops engaging in the behavior. To create more steady and long lasting rates of behavior, Skinner would only reinforce a behavior some of the time. This is called a partial, or intermittent, reinforcement schedule (rather than a continuous reinforcement schedule, or CRF) and there are four major types of partial reinforcement procedural rules: fixed ratio (FR), fixed interval (FI), variable ratio (VR) and variable interval (VI). Each procedure calls for presentation of the reinforcement based on either the number of behaviors produced (ratio) or the timing between behaviors (interval). These schedules of reinforcement each have different effects on behavior and we will see (after discussion of other operant procedures) examples of these schedules in everyday situations.

Skinner eventually became dissatisfied with Thorndike’s trial and error learning procedures. Skinner felt that by appropriate manipulation of behavioral consequences an experimenter could lead an individual to a correct or desired behavior much more quickly than it would be discovered by chance occurrences. He was thus interested in finding a much more efficient form of learning than trial and error. Skinner described his alternative process as one of shaping a desired, or target, response through reinforcement of successive approximations to the target behavior (Peterson, n.d.).

In shaping, reinforcement is presented for varying successive approximations in forms of behavior as they approximate the eventual behavior to be learned. Step-by-step, the organism comes to engage in behaviors that more and more closely approximate the target behavior. Eventually only the target behavior is the one reinforced. Shaping usually takes much less time than trial and error learning, where an experimenter must wait for the organism to produce the target behavior and subsequently reward it. Related to shaping is a process called chaining. Chaining is used to condition an individual to produce a specific series, or sequence, of different behaviors before the final behavior is reinforced. The chaining process uses discriminative stimuli presented after each step to "link" the chain of behaviors together.
Extinction in Operant Conditioning

Extinction is as much as an operant conditioning procedure as it is a classical conditioning one. Extinction is sometimes considered a schedule of reinforcement as it is the process of withholding reinforcement for a previously reinforced behavior. Skinner (1938) noticed that this procedure brings about interesting results in and out of the laboratory. When a rat that has been reinforced for lever pressing is put on extinction, two things will occur: bursts of lever pressing and the appearance of new behaviors. The rat will show and increase in response rate immediately after extinction has begun. The rat will then emit new behaviors that may have been infrequent or not recorded. Each of these are dimensions of what is called response induction. As we have seen, the new behaviors that often follow extinction are key to the shaping procedure.

If a lever press that has been put on extinction is reinforced again, it usually only takes one or two reinforcements before lever pressing returns to it's pre-extinction frequency. This occurs even if extinction lasts days or weeks. This phenomenon (the rapid return of lever pressing) is called spontaneous recovery. As in the case of classical conditioning, the existence of spontaneous recovery suggests that, after extinction, behavior is not extinguished, it is somehow suppressed. The lever pressing did not need to be re-shaped; it emerged quickly after extinction. A human example of extinction can be demonstrated when a soda machine does not give a soft drink even after a person has deposited money into it. Usually, you get response burst, (person pushes the button many times and may deposit more money) and the emergence of new behaviors (kicking, swearing, calling the vendor, etc.)

It is important to note that following the extinction of a reinforced behavior an organism will often display an early increase in the rate of that behavior and then the emergence of new behavior. Skinner called this process of increased response rate and variation "response induction" and it is one effect of extinction. Behavior does not instantly stop as soon as extinction is implemented.

As noted, new behaviors often follow the extinction of a reinforced behavior. Skinner capitalized on this phenomenon when he was developing the operant conditioning procedure of shaping (reinforcing successive approximations and then putting them on extinction in order to draw out new behaviors that would more closely approximate a lever press). This phenomenon may also have some survival value, because if new behaviors were not emitted when reinforcement (especially in the form of food or water) no longer follows a particular behavior, an organism would perish if it simply continued producing the same response over and over again.

After the operant procedure of extinction has been implemented for a previously reinforced behavior and the rate of the behavior jumps initially (bursts) due to response induction, response rates then gradually decline to very low rates. If, however, (even after days of extinction) the behavior is reinforced, the response rate jumps back to near pre-extinction rates. This may happen in only one or two reinforcements. This phenomenon is called spontaneous recovery.
Operant Response Shaping and Chaining

Response shaping is an operant procedure developed by B. F. Skinner to bring about new behaviors in an organism (Peterson, n.d.). This procedure is often used in animal training and usually, but not always, involves positive reinforcement. Shaping procedures also include elements of extinction and is a process whereby the form or function of a behavior is developed into a targeted response. Training a rat to press a lever (target behavior) for food in an operant conditioning chamber is a common example of a shaping procedure. A rat generally does not press a bar very often, if at all, when it is first placed into an operant conditioning chamber (also known as a Skinner box). So how do we get it to do so?

Skinner used the ideas of operant conditioning to find an answer this question. Why not reinforce the rat's behaviors that approximate a bar press? Beginning with what the animal does relatively frequently, say looking at, going over to, and even just sniffing the bar (a behavior that occurs often when a rat is placed into an operant chamber), Skinner reinforced each of these to increase their probability. Then, as each became more likely, Skinner changed the rules of reinforcement to include only those behaviors that more closely resembled or actually were bar presses.

It is important to remember that following the extinction of a reinforced behavior an organism will typically increase the probability of that behavior and also engage in a wider variation of that form of behavior, often resulting in the emergence of new, but related, behaviors. Behavior does not instantly disappear as soon as extinction is implemented but rather reflects this typical "burst" in probability and variability as an early effect of extinction. The appearance of new related forms of behaviors is thus another early effect of extinction.

So after the rat consistently emitted one of the "approximate" behaviors, such as first looking at, or later approaching, and even later for sniffing the bar, it was reinforced (usually with food) for doing so. But soon Skinner would no longer reward the behaviors that least approximated actual bar presses, hence initiating extinction for that behavioral approximation. As soon as that behavior was no longer reinforced, the rat engaged in the behavior even more and emitted variations of the behavior. One variation of sniffing a bar, for example, might be rearing up and placing paws on the bar. When this occurred, Skinner began to reinforce this new behavior. When placing paws on the bar reached a fairly high probability, Skinner would then stop reinforcing paws on the bar and the rat would again begin to emit new variations of such behaviors, one of which typically involves actually scratching at and even pressing down on the bar. Skinner would reinforce this and the shaping procedure would be complete. A bar press behavior had been taught through reinforced successive behavioral approximations to a behavior that might begin with a zero probability of ever occurring.

The shaping process, because of its use of alternating use of reinforcement and extinction, is often called differential reinforcement of successive approximations in behavior. Successive approximations refer to the different behaviors that lead, step-by-step, to the
target behavior (looking at the bar, approaching the bar, the bar sniff, paws on bar, and finally the bar press in this case). Differential reinforcement refers to the fact that we reinforce these approximations until the behaviors are produced reliably and then reinforcement is withheld so that new and different (hence the word differential) behaviors appear that better approximate the target response to be shaped.

The process of shaping also incorporates the creation and use of secondary reinforcers. If you were to shape a dog to "shake hands", you may not want to have to give it food (a primary reinforcer) every time it emits the correct behavior. By the time shaping is half-completed, the dog may be satiated, and food may not work as a reinforcer anymore. Different schedules of reinforcement may not be appropriate in this case, either. What many people do is say "Good, dog!" right before giving it a treat. Eventually, because of the pairing of the praise and food, the praise takes on reinforcing properties (it increases the probability of behavior). Through this classical conditioning procedure of pairing praise with food, you can reinforce the dog less with food and more with praise (now a conditioned reinforcer) and hence complete the shaping process.

In the case of operant chambers rather than dog training, the delivery of food is typically accomplished by a revolving magazine mechanism, much like those that deliver bubble gum one ball at a time from glass vending machines. The sound of this magazine shifting to deliver, in this case, a food pellet serves as a secondary reinforcer much like the praise example above. This allows for behaviors that take place at quite a distance from the actual food dispenser to be reinforced via secondary reinforcers. The establishment of such secondary, or conditioned, reinforcement functions is often referred to as magazine training and the process involves a conditional stimulus (CS is magazine sound) pairing with an unconditional stimulus (UCS is food) relation which is the same as Pavlov's metronome and food in classical conditioning.

Shaping is not limited to use on animals for simple training. Skinner demonstrated the technique had wide applications with his teaching machine, a device that shaped the skills of human students in correctly answering questions in many subjects. Skinner broke down the complex tasks of learning a new subject into small successive units that gradually built into much more complex systems of knowledge. This technique was called programmed instruction and was the basis for how the teaching machine worked.

Skinner’s teaching machines served as the prototypes for many modern computer-assisted instructional and training programs.

In order to shape very complex behaviors, as is often seen in animal performance shows, an operant conditioning procedure known as chaining must be implemented. In chaining, one behavior is "bridged" or linked to another by use of a discriminative stimulus that is always associated with the next behavior being reinforced. This process can be used to allow many behaviors to follow one another before reinforcement is actually delivered. In certain animals, the "chains" can be very long while in others they are short and reinforcement must be delivered more often. Eventually the discriminative stimuli that bridge each behavior to the next may be gradually "faded" to generalize the discrimination
to the behavioral act itself, thus generating a sequence where one behavior sets the occasion for the next behavior, with the eventual end of the chain of different behaviors being the one reinforced.

If a dog trainer wants a dog to learn to "shake hands," then jump through a hoop and then stand on two feet, begging, that trainer will first shape the begging behavior in the presence of some hand signal, such as "hand raised in air." Once this is reliable, the trainer will present hoops (a second discriminative stimulus) and the dog will only be reinforced when it jumps through hoops and sees a hand raised to signal the begging. Finally, the dog will be shaped to shake, which will bring about the hoops, which signal that jumping and then begging will be reinforced. If the dog doesn't shake, the hoops will not appear, and no reinforcement will be given. Eventually, through this chaining procedure, the dog will shake, jump through the hoop and beg in smooth succession (reinforcement being given after the beg only).

Users of the CyberRat laboratory simulation may wish to read a step-by-step description of how best to shape an animal with no prior experimental history. There is such a collection of topics available in the Appendix. These include:

- Understanding the Experimental Chamber.
- Getting Your Subject Ready for Shaping: Habituation
- Getting Your Subject Ready for Shaping: Magazine Training
- Getting Your Subject Ready for Shaping: Observe Behavior Carefully
- Begin Shaping (If Operant Level is Low) Shaping: Not Too Slow, Not Too Fast

Schedules of Reinforcement

One group of procedures Skinner developed in his work on operant conditioning is that involving reinforcement schedules (Ferster & Skinner, 1957). Schedules of reinforcement are simple rules for when reinforcement should be given following a specific behavior. The two main schedule rules are continuous and partial reinforcement. Another word for partial reinforcement is intermittent (less than continuous) reinforcement. The most common intermittent reinforcement rules include four specific types of schedules: fixed ratio, variable ratio, fixed interval and variable interval. Skinner observed that these different schedules have different effects on rates of responding, each of which will be illustrated by the graphics that accompany our more detailed descriptions of each schedule in this or subsequent topical discussions.

In a continuous reinforcement schedule every occurrence of a behavior is reinforced. If a rat is on a continuous schedule of reinforcement (often abbreviated as CRF) for lever pressing, every lever press is reinforced. A child, for example, who gets some dessert every time he or she finishes dinner is on a continuous schedule of reinforcement. As Skinner
noted, this schedule produces a relatively moderate and steady rate of responding until the organism becomes satiated (an animal gets so much food as reinforcement that it is no longer hungry or the child has received desserts so often, he/she is tired of them.) This can occur relatively quickly, depending on the size of the reinforcer, and thus is not an efficient means for maintaining a steady rate of responding over sustained periods of time. The accompanying figure is a simulated graphic illustrating both the relatively steady rate of responding and the slowing or elimination effects of satiation to the reinforcer within a single session.

Both to avoid having to use so much food and to

counteract the satiation effects of continuous reinforcement, Skinner used intermittent schedules of reinforcement (Ferster & Skinner, 1957). In intermittent schedules of reinforcement, only certain occurrences of a class of behaviors are reinforced. Sometimes the rule defining which behavioral occurrence should be reinforced is based on time elapsed plus the required response. Thus in what are called the interval schedules a predetermined amount of time must go by before reinforcement is delivered for the first response occurring after the interval of non-reinforcement for responding. Such interval schedules exist as either fixed or variable interval schedules. That is, the amount of time that reinforcement is not delivered for any behaviors is either the same interval following actual reinforcement, or time intervals are randomized durations around some average interval length.

Alternatively, delivery of reinforcement may be based on the number of times a specific class of behavior occurs (called ratio schedules because a particular type of response must occur a certain number of times before reinforcement is given). Such rules include fixed ratio schedules, where the required number of responses stay the same from one reinforced behavior to another, and variable ratio schedules where the number required between reinforcement delivery is some random number around a specific "average" of responses, such a an average of 10-to-1 or 20-to-1 (that is, on average one of 10 or 20 responses will be reinforced, but will randomly vary from 1 to any number, so long as in the long-term, the average of 10 or 20 is maintained).

In laboratory studies using either rats or pigeons, Skinner (Skinner & Ferster, 1957) found that the rates of behavior are different for the various partial schedules of reinforcement and that the schedule chosen is often a function of what type of responding a researcher, or employer for that matter, might desire. Both the interval schedules of reinforcement and the ratio schedules of reinforcement and how they effect the rate of responding effects each type of schedule are covered in more detail in those respective topical discussions.

While conducting research on schedules of reinforcement as variations in operant conditioning procedures, Skinner noticed an interesting phenomenon surrounding the use of partial reinforcement. When a pigeon on continuous reinforcement is subsequently put on extinction (no reinforcement is delivered), the animal emits a burst of responses at first, but then gradually stops responding. In contrast, a pigeon that has been gradually moved to
a partial schedule of reinforcement (especially if it is "lean" meaning reinforced rarely in the face of producing lots of responses) will continue responding for a very long time when moved to extinction; often taking multiple sessions before slowing down after extinction is started. This resistance to extinction follows any type of partial reinforcement schedule as long as the schedule is brought on gradually and is a relatively lean schedule. This resistance to extinction phenomenon is thus one of the primary partial reinforcement effects.

**Ratio Schedules of Reinforcement**

Skinner’s research on operant conditioning procedures eventually led him to investigate intermittent, as opposed to continuous, reinforcement schedules (Ferster |_2 Skinner, 1957). Intermittent schedules of reinforcement are simple rules for delivering single reinforcements for multiple occurrences of a specific type of behavior, such as lever pressing. Skinner's original investigations used continuous reinforcement, where each and every lever press was reinforced. But in subsequent research he began to investigate what would happen if not every lever press was reinforced, a practice known as applying rules of intermittent (less than continuous) reinforcement.

One of the simplest, and thus most common intermittent reinforcement rules involves using some ratio of some number of required lever presses for each delivery of one reinforcement. Such ratios may use a "fixed" number, such as FR-10 where every 10th response would be reinforced, or a variable number, such as VR-10, where any constantly varying and random number of responses is used as the criterion for delivering reinforcement for the criterion lever press, so long as a large sample of these ratios average the reference ratio number (in our case, 10).

A special case of the ratio schedule, known as CRF or FR-1, is actually a continuous reinforcement schedule where every occurrence of a behavior is reinforced. If a rat is on a continuous schedule of reinforcement for lever pressing, every lever press is reinforced. A child, for example, who gets some dessert every time he or she finishes dinner is on a continuous schedule of reinforcement. Skinner’s earliest work (Skinner, 1938) investigated this schedule almost exclusively, and he observed this schedule to produce a relatively moderate and steady rate of responding until the organism becomes satiated (an animal gets so much food as reinforcement that it is no longer hungry or the child has received desserts so often he/she is tired of them.) This can occur relatively quickly, depending on the size of the reinforcer, and thus is not an efficient means for maintaining a steady rate of responding over sustained periods of time. The accompanying figure is a simulated graphic illustrating both the relatively steady rate of responding and the slowing or elimination effects of satiation to the reinforcer within a single session.

To avoid using so many food pellets, which in his early research he had to hand-manufacture, Skinner eventually investigated intermittent schedules of reinforcement (Ferster |_2 Skinner, 1957). In intermittent schedules of reinforcement, only certain occurrences of a class of behaviors are reinforced. Sometimes the rule defining which behavioral occurrence should be reinforced is based on some interval of time elapsed plus
the required response, thus generating what is known as the interval schedules of reinforcement.

Alternatively, delivery of reinforcement may be based on the number of times a specific class of behavior occurs (a particular type of response, such as a lever press or a key peck, must occur a certain number of times before reinforcement is given). Such rules include fixed ratio schedules, where the required number of responses stay the same from one reinforced behavior to another, and variable ratio schedules where the number required between reinforcement delivery is some random number around a specific average number of responses, such a an average of 10-to-1 or 20-to-1 (that is, on average one of 10 or 20 responses will be reinforced, but will randomly vary from 1 to any number, so long as in the long-term, the average of 10 or 20 is maintained).

In laboratory studies using either rats or pigeons, Skinner (Skinner & Ferster, 1957) found that the rates of behavior are different for the various partial schedules of reinforcement and that the schedule chosen is often a function of what type of responding a researcher, or employer for that matter, might desire. A rat which gets reinforced every twentieth lever press is operating under a fixed ratio schedule of reinforcement (actually, an FR-20). As Skinner's research illustrated, this version of partial reinforcement produces very steady rates of responding, but only after a brief break after the reinforcement is delivered-a pattern often referred to as break run (see the accompanying illustration). Factory workers who get a certain amount of money for, say, every 5th completed unit of product are working under a fixed ration schedule of reinforcement. In the workplace fixed ratio schedules are known as piecework schedules wherein pay is based on a fixed number of components produced (an example of measuring behavior by its effects on environment, which is the defining feature of operant behavior -- it "operates upon environments" to produce some effect -- in this case, a part of some sort). In his laboratory, Skinner discovered that this schedule produced a fairly predictable brief break followed by a steady rate of subsequent responding. Employers often use piecework schedules because they usually result in relatively high productivity.

The variable ratio schedule is also a partial schedule of reinforcement. A variable ratio schedule of reinforcement, like a fixed ratio, involves the delivery of reinforcement based on the number of behavior occurrences. In a variable schedule, however, it is an average number, not a fixed number, of responses that are reinforced. A rat on this schedule may get reinforced, on average, for every ten responses. But because it is an average, reinforcement may come after two responses or after twenty. Reinforcement is not delivered every ten responses, although there may be a time when a tenth response is reinforced. Skinner noted that this is a very powerful schedule and it produces very high and quite constant rates of responding.

Gambling on slot machines is a clear example of a variable ratio schedule of reinforcement. For instance, on average, every 50th hit on the machine will being about a jackpot (reinforcement). This means that the jackpot could occur in two hits or two hundred hits. Gamblers find this possibility (two hits until jackpot) irresistible and many develop gambling problems because this type of reinforcement schedule produces high and
consistent rates of responding. Many individuals continue gambling despite increasing debt because the indeterminate predictability of reinforcement and also because of the unique resistance to extinction caused by intermittent reinforcement.

As with interval schedules of reinforcement, a pigeon or a person that has been gradually moved to a ratio schedule of intermittent reinforcement (especially if it is a lean schedule, meaning reinforced on average or on every, say, 50th response rather than, say, every 5th response) will continue responding for a very long time when moved to extinction; often taking multiple sessions before slowing down after extinction is started. This resistance to extinction follows any type of partial reinforcement schedule as long as the schedule is brought on gradually and is relatively lean. This phenomenon is thus called the resistance to extinction effect of intermittent schedules of reinforcement.

**Interval Schedules of Reinforcement**

One group of procedures Skinner developed in his work on operant conditioning is that involving reinforcement schedules (Ferster |2 Skinner, 1957), or simple rules for which occurrences of a behavior will be reinforced. If reinforcement is not continuous -- delivered for every occurrence of a type of behavior -- then a partial, or intermittent, reinforcement schedule is in effect. Common rules for scheduling intermittent reinforcement include fixed ratio, variable ratio, fixed interval and variable interval. In this section we will consider the unique response rate patterns generated by either fixed or variable interval schedules of reinforcement.

In interval schedules of reinforcement, the amount of time that reinforcement is not delivered for any behaviors is either the same duration following a reinforcement (fixed interval schedules), or time intervals are randomized durations around some average interval length (variable interval schedules, which are sometimes also called random interval schedules). If, as a researcher, you were to reinforce a rat for the first lever press that occurred after one minute following a previous reinforcement, you would be using a fixed interval schedule of reinforcement called an FI-60 (for the 60 seconds that elapses after the last reinforcement before the next response will generate another reinforcer). As a partial schedule, only the lever press that follows a one-minute interval is reinforced, and then a new one-minute interval is reset. Any lever press occurring during this one minute interval fails to bring reinforcement.

In laboratory studies using either rats or pigeons, Skinner (Skinner |2 Ferster, 1957) found that the rates of behavior generated by interval schedules of reinforcement are uniquely but predictably variable across time, thereby creating a predictable "pattern" in the rate of responding for fixed vs variable interval schedules. A fixed interval schedule, as can be seen in the accompanying graphic illustration, produces one of the more unique response patterns. This pattern is typically described as a scalloping change in the rate of responding. What happens is that immediately after being reinforced, the rat stops responding. But as time passes, responding begins, at first slowly, and then the rate increases until it is very high near the end of the minute. This means that when the interval expires, the animal is very likely to respond, and the first such response is reinforced. As
you can see, because of the scalloping effect, this schedule is not efficient at producing steady rates of responding.

Many teachers give weekly exams to test what students have learned in a given course. The opportunity to be reinforced for studying, by receiving an "A", is on a fixed (because it is every week) interval schedule of reinforcement. As Skinner noted in the laboratory (and as many parents and teachers know) the rate of responding under this schedule is scalloped. This means that right after a quiz, responding (studying) drops to nothing. Responding then slowly increases three nights away from the next quiz, until students are "cramming" the night before. This schedule is ineffective at maintaining a steady rate of responding (studying) both in and out of the laboratory.

The variable interval schedule uses rules similar to the fixed interval schedules, except the duration of the interval constantly changes in a random fashion around some average. Thus a VI-60 schedule would result in an average non-reinforcement availability period of 60 seconds, but each specific period could be any duration so long as a large sample of these intervals results in an average of 60 seconds. So under a variable, or random, interval schedule, a rat would be reinforced, on average, for the first response occurring after one minute from the last response. This means that the rat may receive reinforcement after, say, twenty seconds between behaviors or after four minutes between behaviors.

Has a teacher/professor ever given pop quizzes in a course you have taken? If he/she did, they would be using a variable interval schedule of reinforcement. What was the effect on the way members of the class prepared for the exam? As demonstrated by the accompanying graphic illustration, Skinner observed that the rate of responding under a variable interval schedule, although not as high in ratio schedules, is very steady and consistent.

So your instructor who gives pop quizzes is using a variable interval schedule of reinforcement in an effort to maintain high and consistent rates of studying. Perhaps the quizzes are given weekly, on average, but a subsequent quiz could come, one or two days or even two weeks after the last quiz. Since a student has no idea when the next quiz will come, studying is much more consistent than with weekly (fixed interval) exams.

While conducting research on schedules of reinforcement in operant conditioning, Skinner noticed an interesting phenomenon accompanying the use of partial reinforcement. When a pigeon on continuous reinforcement is subsequently put on extinction (reinforcement is no longer delivered for responding a specific way), the animal emits a burst of responses at first (a phenomenon known as response induction), but then gradually stops responding. In contrast, a pigeon that has been gradually moved to a partial schedule of reinforcement (especially if it is "lean," meaning, for example, the animal is reinforced for the first response following on average an interval of 180 seconds) will continue responding for a very long time when moved to extinction. In fact, it often takes multiple sessions before responding begins slowing down after extinction has started. This is known as resistance to extinction and it follows any type of partial reinforcement schedule as long as the schedule is brought on gradually and is relatively lean. Resistance to extinction explains why very
lean schedules of reinforcement result in behaviors that are very persistent as well as occurring at a high rate. So both high rates of responding and resistance to extinction are often known as partial reinforcement effects.

Applications of Operant Conditioning

B. F. Skinner’s operant conditioning principles have been applied in many areas. In education, operant procedures have been used to develop programmed instruction, a teaching technique based on elements of shaping and chaining (Skinner, 1968). Programmed instruction was used extensively in Skinner’s early development of teaching machines, which today have been replaced by computers. In fact, the text you are reading right now incorporates mainly operant principles in its approach to computer-assisted instructional design. Its reliance on adaptive adjustments to changing learner skills is a direct application of shaping procedures applied to higher-level reading comprehension and learning skills (Ray, 2004).

Operant principles are also used in various therapies. Miller introduced operant procedures as the defining technique in biofeedback (Miller, 1969); a therapy designed to reduce stress and physical reactions to stress. Alternatively, behavior modification for misbehaving children is often implemented in the home as well as in the school. Through secondary reinforcement offered through token economies (Ayllon & Azrin, 1968) a client’s good behavior may be positively reinforced and inappropriate behaviors ignored.

Animal trainers use operant conditioning procedures when training performance animals. Circuses, marine parks and zoos use shaping, chaining, and other procedures in order to teach animals to perform both for display and entertainment as well as for routine animal care, such as presenting a leg for drawing a blood sample. People also use operant procedures, sometimes unwittingly, when training their own pets (Pryor, 1985). Giving a dog a treat when it “shakes hands” is using the principle of positive reinforcement.

Programmed Instruction

Whether teachers recognize it or not, operant conditioning principles are often incorporated into the classroom environment (Skinner, 1968). In traditional teaching, instructors lecture and students take notes. Or perhaps students work either independently or in small groups on what has been previously presented by the teacher. But because there is only one teacher in a classroom, students do not get immediate feedback as to the accuracy of their work. Skinner’s approach to this problem was to develop what is called programmed instruction.

Skinner also designed an apparatus called a teaching machine (Skinner, 1989) as a key element in the delivery of programmed instruction. The machine was a box with a window and a scrolling knob. The student was presented with some introductory material and then questions about that material for the student to answer. The student then scrolled the knob to reveal the answer to confirm whether they had learned the material presented. The
student was to continue this process until he/she reached mastery of a series of such programmed sequences, or "frames" of material.

As the student progressed, the machine could be fitted to present more difficult material. Alternatively, it could also be taken down a level of difficulty if extra review was necessary. Through reinforcement (feedback indicating that the student answered correctly) and successive approximations (increasing difficulty of materials) students are shaped and taught mastery in any subject the instructor uses the machine to teach.

Does this sound familiar? It should, the operations in the teaching machine are the forerunners of computer aided instruction, and are the very basis for how the tutoring component of the software you are currently using works (Ray, 2004). Teaching machines never really caught on in mainstream classrooms, mostly because people feared that they were impersonal and lacked the warmth of teachers. Nevertheless, many students progressed far more rapidly and with far fewer errors in their learning using such teaching designs. Thus programmed instruction has evolved into the increasingly popular computer assisted instruction of today and research has found such instruction to be highly effective.

As noted, Skinner's teaching machine used the procedure of shaping, or successive approximations, to assist students in their learning process. Successive approximations to a final learning goal is often the foundation in programmed instruction. But not all forms of computer assisted instruction are based on this operant principle.

Most of computerized teaching programs may look similar to programmed instruction, in that they ask students questions after readings and then give immediate feedback as to the accuracy of answers. But few such programs require that the student progress toward less and less dependency upon the programmed strategy. This is a shortcoming of all but the most sophisticated of programs that incorporate what is called "adaptive instruction" designs (Ray, 2004). That is, the learning goals are changed to adapt to the individual learner's changing skills and knowledge.

All computer-assisted instruction allows the teacher to spend time with students who are having difficulty while allowing more advanced students to continue and excel with immediate feedback. But few are designed to give and then fade supportive prompts and to present successively more difficult questions as the adaptive instructional software you are currently using does when used in "Tutor" mode of presentation.

Thus the computer assisted instruction material you are currently studying uses principles and procedures based originally on Skinner’s programmed instruction (Ray, 2004). The tutor mode of the MediaMatrix software program turns your computer into a more modern and sophisticated version of Skinner’s teaching machine. When you are in the tutor mode, the system helps prompt you as to the most important concepts and properties of those concepts, then asks you questions at the end of each segment of material presented. The system begins with the highest density of prompting, the smallest frame of content, and the easiest form of question, multiple choice. As you progress, the prompts are gradually faded,
the unit or frame of content presented gets larger, and the questions become more difficult if you answer a series of questions accurately.

The MediaMatrix adaptive instructional system gradually moves from multiple choice questions to the less prompted fill in the blank, association recognition and, finally, minimally prompted verbal associates questions as you become more proficient in learning the material with less help and greater accuracy. If you begin to have difficulty with specific content or at a current level of difficulty, the program will successively drop levels until you are succeeding again. Because all lower level (multiple choice and fill blank) questions are also represented in the association form of questioning, the system shapes the user into being able to answer accurately the more challenging association questions that depend upon total recall, as opposed to mere recognition, of the material.

This programmed instructional format, called adaptive instruction, relies upon artificial intelligence to compare the students’ growing verbal or semantic networks of terms to an expert’s network to adjust all of its varieties of presentations, including which questions you are asked. Such adaptive programmed instruction is designed to eventually wear the student from the need for programmed formats, thus teaching the student how to learn more traditionally presented materials through a shaping of that reading comprehension skill.

Such computer-based adaptive instruction can assist instructors and students alike (Ray, 2004). Students who have tutored on materials assigned prior to a class that intends to cover much the same topic of material find they are well prepared in the fundamentals, which allows the instructor to take more time teaching other dimensions, such as ethics, applications, or research foundations, and less time on simple definitional, conceptual, and review of fundamentals. The goal is to create prepared learners and to allow everyone to be at much the same level of understanding when the class begins. These were the goals of Skinner when he first designed programmed instruction and teaching machines. But it took the development of modern personal computers and sophisticated software development to achieve the real aspirations of Skinner’s inventions based on the application of operant principles in and out of the classroom.

**Therapeutic Applications of Operant Conditioning**

Skinner’s operant conditioning principles also are the foundation of various therapeutic applications (Skinner, 1972). Behavior modification, or the process of changing responses through stimulus control and token reinforcement economies, is one such application. Token economies (Ayllon & Azrin, 1968) work to reinforce positive behaviors while simultaneously placing inappropriate behaviors on extinction. In psychiatric institutions token economies help maintain appropriate behaviors by reinforcing those behaviors directly. Likewise, disruptive classroom behaviors can be reduced through extinction and the reinforcement of more appropriate behaviors as well (Swiezy, Matson, & Box, 1992). Even maladaptive physiological responses, such as anxiety or migraine headaches, can be addressed by operant techniques that use additional feedback, known as biofeedback (Miller, 1969), to help an individual know the state of normally unconscious bodily...
processes. It is thus worth considering each of these types of therapeutic applications of operant conditioning in a bit more detail.

Behavior modification is an operant approach to overt behavioral therapy and education (Bellack, Hersen, & Kazdin, 1982). The responses targeted for change are usually maladaptive for the individual and/or are inappropriate in given situations. For example, behavior modification processes are often used in schools to help children whose behaviors have become disruptive and harmful to themselves or others. Behavior modification is also used in psychiatric institutions or institutions for the severely mentally challenged. The goal of behavior modification is to teach appropriate behaviors that serve the same function as maladaptive or absent behaviors (i.e., functions such as getting attention, help, praise, food, relief from boredom, etc.) This is usually accomplished with token economies being the specific type of consequential stimulus (reinforcement) Token economies rely upon conditioned reinforcers, such as poker chips, points, or stars on a chart, used in a rule-guided process. A token economy utilizes both positive reinforcement and secondary reinforcers. Behavior modification is accomplished through the use of tokens to reward certain behaviors that occur during certain situations (stimulus discrimination) and thus represent a popular method of both antecedent and consequential stimulus control (Ayllon & Azrin, 1968). Once an individual has accumulated a certain amount of these tokens (conditioned reinforcers), the tokens can be traded in for more direct and tangible reinforcers in the form of toys, favorite snacks, time with a computer game or anything that can be presented that will increase the probability of a behavior (positive reinforcement).

For example, consider a first grade classroom where playing with blocks is not a maladaptive or harmful behavior unless it occurs during the class time when a teacher is trying to instruct her class in preparation for some activity. Some children may start or continue playing with a toy during a time or circumstance such as this when it is inappropriate to do so. Instead of punishing the child to eliminate such undesirable behaviors, token economies can be used to create more desirable alternatives. For example, the child can receive a gold star every time they pay attention when it is appropriate in class. Then, at recess they can play freely and safely for even more gold stars. After so many stars, the child may then receive a favorite snack or time with a favorite game or computers. If the right reinforcement is used for the right behavior in the right setting, the child will begin to play with blocks only during play time and to pay attention during the class time that requires attending. This application of Skinner’s operant procedures has been found to be very effective across many different situations, both educational and institutional.

Stimulus control in behavior modification may refer not only to the process of reinforcement, but also the process of controlling for antecedent stimulus discriminations in such a way that maladaptive behaviors become more appropriate and acceptable responses in specific situations. We cannot completely rid a person (or any organism) of a particular behavior. It may reappear anytime circumstances permit. But by controlling reinforcement and the discriminative settings where behaviors are appropriate, it is possible to create environments where maladaptive behaviors have no function and where
new and more acceptable behaviors do. Eventually, acceptable responses replace those that are inappropriate. This is the essence of antecedent and consequential stimulus control, and it represents an application of Skinner’s operant procedures.

Quite a different form of application of operant conditioning was developed largely by Neal Miller (1969) and is called biofeedback. Biofeedback is an operant approach to therapy that uses visual and/or auditory signals to reflect some internal state of the patient -- states that he or she would otherwise not be aware of. These signals, or feedback, serve as positive reinforcement when they indicate that the individual has successfully changed his or her internal responses in some target direction or amount. For example, someone who gets anxious in crowds may wear a heart rate monitor in a crowded situation. They then may read the monitor and use relaxation techniques to keep their heart rate under a certain level. The same can occur with high blood pressure. An individual can wear a blood pressure monitor at work and learn to keep it under a certain level by relaxing when a stressful situation presents itself. Since successful readings serve as positive reinforcers, people learn to relax in anxiety or stress provoking situations. The research on the effectiveness of Miller’s biofeedback therapy is mixed, but it has been shown to be useful under various conditions, including control of migraine headaches (c.f., Sturgis, Tollison, _2 Adams, 1978).

**Operant Procedures in Animal Training**

Response shaping is an operant procedure developed by B. F. Skinner to bring about new behaviors in an organism (Peterson, n.d.). This procedure is often used in animal training and usually, but not always, involves positive reinforcement (Skinner, 1951). Shaping procedures also include elements of extinction and is a process whereby the form or function of a behavior is gradually developed into the desired (target) response. Training a rat to press a bar (the target behavior) for food in an operant chamber is a common example of a shaping procedure. A rat generally does not press a bar very often, if at all, when it is first placed into an operant conditioning chamber (also known as a Skinner box). So how do we get it to do so? Skinner used the processes of operant conditioning to find an answer this question. Why not begin by reinforcing the rat’s behaviors that approximate a bar press, even if they are remote from actual bar presses, and then gradually shift the criteria for reinforcement to only those behaviors that more closely resemble bar pressing? Beginning with what the animal does relatively frequently, say looking at, going over to, and even just sniffing the bar (a behavior that occurs often when a rat is placed into an operant chamber), Skinner reinforced each of these to increase their probability. Then, as each of these behaviors became more likely, Skinner changed the rules of reinforcement to include only those behaviors that more closely resembled or actually were bar presses.

It is important to remember that following the extinction of a reinforced behavior an organism will typically increase the probability of that behavior and also engage in a wider variation of that form of behavior, often resulting in the emergence of new, but related, behaviors. Behavior does not instantly disappear as soon as extinction is implemented but rather reflects response induction, which is an increase in probability and variability as an
early effect of extinction. The appearance of new, but somewhat similar or related forms of behaviors is thus another early effect of extinction.

So after the rat consistently emitted one of the "approximate" behaviors, such as first looking at, or later approaching, and even later for sniffing the bar, it was reinforced (usually with food) for doing so. But soon Skinner would no longer reward the behaviors that least approximated actual bar presses, hence initiating extinction for that behavioral approximation. As soon as that behavior was no longer reinforced, the rat engaged in response induction by emitting the behavior even more frequently and engaging in variations on that behavior.

One variation of sniffing a bar, for example, might be rearing up and placing paws on the bar. When this occurred, Skinner reinforced this new behavior. When placing paws on the bar reached a fairly high probability, Skinner would then stop reinforcing paws on the bar and the rat would again begin to emit new variations of such behaviors, one of which typically involves actually scratching at and even pressing down on the bar. Skinner would reinforce this and the shaping procedure would be complete. A bar press behavior had been taught through reinforced successive behavioral approximations to a behavior that might begin with a zero probability of ever occurring.

The response shaping process, because of its use of alternating use of reinforcement and extinction, is often called differential reinforcement of successive approximations in behavior. Successive approximations refer to the different behaviors that lead, step-by-step, to the target behavior (steps such as looking at the bar, then approaching the bar, then bar sniffs, paws on bar, and finally the bar press in our example). Differential reinforcement refers to the fact that we, at first, will reinforce any or all of these variations until one of the behaviors is produced reliably and then reinforcement is withheld so that new and different (hence the word differential) behaviors appear that more closely approximate the target response being shaped.

The process of shaping also incorporates the creation and use of secondary reinforcers. If you were to shape a dog to "shake hands", you may not want to have to give it food (a primary reinforcer) every time it emits the correct behavior. By the time shaping is half-completed, the dog may be satiated, and food may not work as a reinforcer anymore. Different schedules of reinforcement may not be appropriate in this case, either. What many people do is to use a child’s toy "cricket" to produce a click, or to say "Good, dog!" right before giving it a treat (Pryor, 1985). Eventually, because of the pairing of the click or praise and food, the sound takes on reinforcing properties (it increases the probability of behavior). This is a classical conditioning, or stimulus contingency, procedure involving the pairing of the previously neutral sound (NS/CS) of the clicker or praise with food (UCS). This allows you to be able to reinforce the dog less with food and more with clicks or praise (now conditioned reinforcers) and hence to complete the shaping process without the animal becoming satiated on food.

In the case of operant chambers rather than dog training, the delivery of food is typically accomplished by a revolving magazine mechanism, much like those that deliver bubble
gum one ball at a time from glass ball vending machines. The sound of this magazine shifting to deliver, in the rat's case, a food pellet serves as a secondary reinforcer much like the clicker or praise example above. This allows for behaviors that take place at quite a distance from the actual food dispenser to be reinforced via the secondary or conditioned reinforcer of the sound. The establishment of such secondary conditioned reinforcement functions is often referred to as magazine training.

There is a highly sophisticated computer simulation program available (at www.cyberrat.net) called CyberRat, that allows students who do not have access to live animal laboratories to experience both magazine training and shaping dynamics via simulation. This simulator uses an extremely large array (over 1800) of very brief digital video clips of live animals in a traditional operant chamber to produce the highly realistic illusion of a seamless real-time video feed showing a live animal being placed into an operant conditioning chamber and behaving exactly as real animals behave in this environment.

Through artificially intelligent algorithms the sequences of these clips may be altered through a student's reinforcement button by delivering simulated "water reinforcements" to any selected individual animal for its successive approximations to bar pressing. If you reward the animal appropriately, the video clips alter their sequences to simulate actual changes in behavior that simulate the entire operant response shaping process with highly realistic results. If you have access to CyberRat, visit the Appendix Elaboration on Shaping linked here for more details on how you can learn to shape a laboratory rat just as Skinner did!

**B. F. SKINNER: Summarized**

**1904 - 1990**

**Dr. C. George Boeree**

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**Biography**

Burrhus Frederic Skinner was born March 20, 1904, in the small Pennsylvania town of Susquehanna. His father was a lawyer, and his mother a strong and intelligent housewife. His upbringing was old-fashioned and hard-working.

Burrhus was an active, out-going boy who loved the outdoors and building things, and actually enjoyed school. His life was not without its tragedies, however. In particular, his brother died at the age of 16 of a cerebral aneurysm.
Burrhus received his BA in English from Hamilton College in upstate New York. He didn’t fit in very well, not enjoying the fraternity parties or the football games. He wrote for school paper, including articles critical of the school, the faculty, and even Phi Beta Kappa! To top it off, he was an atheist -- in a school that required daily chapel attendance.

He wanted to be a writer and did try, sending off poetry and short stories. When he graduated, he built a study in his parents’ attic to concentrate, but it just wasn’t working for him.

Ultimately, he resigned himself to writing newspaper articles on labor problems, and lived for a while in Greenwich Village in New York City as a “bohemian.” After some traveling, he decided to go back to school, this time at Harvard. He got his masters in psychology in 1930 and his doctorate in 1931, and stayed there to do research until 1936.

Also in that year, he moved to Minneapolis to teach at the University of Minnesota. There he met and soon married Yvonne Blue. They had two daughters, the second of which became famous as the first infant to be raised in one of Skinner's inventions, the air crib. Although it was nothing more than a combination crib and playpen with glass sides and air conditioning, it looked too much like keeping a baby in an aquarium to catch on.

In 1945, he became the chairman of the psychology department at Indiana University. In 1948, he was invited to come to Harvard, where he remained for the rest of his life. He was a very active man, doing research and guiding hundreds of doctoral candidates as well as writing many books. While not successful as a writer of fiction and poetry, he became one of our best psychology writers, including the book *Walden II*, which is a fictional account of a community run by his behaviorist principles.

August 18, 1990, B. F. Skinner died of leukemia after becoming perhaps the most celebrated psychologist since Sigmund Freud.

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**Theory**

B. F. Skinner’s entire system is based on **operant conditioning**. The organism is in the process of “operating” on the environment, which in ordinary terms means it is bouncing around its world, doing what it does. During this “operating,” the organism encounters a special kind of stimulus, called a **reinforcing stimulus**, or simply a reinforcer. This special stimulus has the effect of increasing the **operant** -- that is, the behavior occurring just before the reinforcer. This is operant conditioning: “the behavior is followed by a consequence, and the nature of the consequence modifies the organisms tendency to repeat the behavior in the future.”

Imagine a rat in a cage. This is a special cage (called, in fact, a “Skinner box”) that has a bar or pedal on one wall that, when pressed, causes a little mechanism to release a food pellet
into the cage. The rat is bouncing around the cage, doing whatever it is rats do, when he accidentally presses the bar and -- hey, presto! -- a food pellet falls into the cage! The operant is the behavior just prior to the reinforcer, which is the food pellet, of course. In no time at all, the rat is furiously peddling away at the bar, hoarding his pile of pellets in the corner of the cage.

*A behavior followed by a reinforcing stimulus results in an increased probability of that behavior occurring in the future.*

What if you don’t give the rat any more pellets? Apparently, he’s no fool, and after a few futile attempts, he stops his bar-pressing behavior. This is called **extinction** of the operant behavior.

*A behavior no longer followed by the reinforcing stimulus results in a decreased probability of that behavior occurring in the future.*

Now, if you were to turn the pellet machine back on, so that pressing the bar again provides the rat with pellets, the behavior of bar-pressing will “pop” right back into existence, much more quickly than it took for the rat to learn the behavior the first time. This is because the return of the reinforcer takes place in the context of a reinforcement history that goes all the way back to the very first time the rat was reinforced for pushing on the bar!

**Schedules of reinforcement**

Skinner likes to tell about how he “accidentally” — i.e. operantly — came across his various discoveries. For example, he talks about running low on food pellets in the middle of a study. Now, these were the days before “Purina rat chow” and the like, so Skinner had to make his own rat pellets, a slow and tedious task. So he decided to reduce the number of reinforcements he gave his rats for whatever behavior he was trying to condition, and, lo and behold, the rats kept up their operant behaviors, and at a stable rate, no less. This is how Skinner discovered **schedules of reinforcement**!

**Continuous reinforcement** is the original scenario: Every time that the rat does the behavior (such as pedal-pressing), he gets a rat goodie.

The **fixed ratio schedule** was the first one Skinner discovered: If the rat presses the pedal three times, say, he gets a goodie. Or five times. Or twenty times. Or “x” times. There is a fixed ratio between behaviors and reinforcers: 3 to 1, 5 to 1, 20 to 1, etc. This is a little like “piece rate” in the clothing manufacturing industry: You get paid so much for so many shirts.

The **fixed interval schedule** uses a timing device of some sort. If the rat presses the bar at least once during a particular stretch of time (say 20 seconds), then he gets a goodie. If he fails to do so, he doesn’t get a goodie. But even if he hits that bar a hundred times during that 20 seconds, he still only gets one goodie! One strange thing that happens is that the
rats tend to “pace” themselves: They slow down the rate of their behavior right after the reinforcer, and speed up when the time for it gets close.

Skinner also looked at **variable schedules**. Variable ratio means you change the “x” each time -- first it takes 3 presses to get a goodie, then 10, then 1, then 7 and so on. Variable interval means you keep changing the time period -- first 20 seconds, then 5, then 35, then 10 and so on.

In both cases, it keeps the rats on their rat toes. With the variable interval schedule, they no longer “pace” themselves, because they can no longer establish a “rhythm” between behavior and reward. Most importantly, these schedules are very resistant to extinction. It makes sense, if you think about it. If you haven’t gotten a reinforcer for a while, well, it could just be that you are at a particularly “bad” ratio or interval! Just one more bar press, maybe this’ll be the one!

This, according to Skinner, is the mechanism of gambling. You may not win very often, but you never know whether and when you’ll win again. It could be the very next time, and if you don’t roll them dice, or play that hand, or bet on that number this once, you’ll miss on the score of the century!

**Shaping**

A question Skinner had to deal with was how we get to more complex sorts of behaviors. He responded with the idea of **shaping**, or “the method of successive approximations.” Basically, it involves first reinforcing a behavior only vaguely similar to the one desired. Once that is established, you look out for variations that come a little closer to what you want, and so on, until you have the animal performing a behavior that would never show up in ordinary life. Skinner and his students have been quite successful in teaching simple animals to do some quite extraordinary things. My favorite is teaching pigeons to bowl!

I used shaping on one of my daughters once. She was about three or four years old, and was afraid to go down a particular slide. So I picked her up, put her at the end of the slide, asked if she was okay and if she could jump down. She did, of course, and I showered her with praise. I then picked her up and put her a foot or so up the slide, asked her if she was okay, and asked her to slide down and jump off. So far so good. I repeated this again and again, each time moving her a little up the slide, and backing off if she got nervous. Eventually, I could put her at the top of the slide and she could slide all the way down and jump off. Unfortunately, she still couldn’t climb up the ladder, so I was a very busy father for a while.

This is the same method that is used in the therapy called **systematic desensitization**, invented by another behaviorist named **Joseph Wolpe**. A person with a phobia -- say of spiders -- would be asked to come up with ten scenarios involving spiders and panic of one degree or another. The first scenario would be a very mild one -- say seeing a small spider at a great distance outdoors. The second would be a little more scary, and so on, until the tenth scenario would involve something totally terrifying -- say a tarantula climbing on
your face while you’re driving your car at a hundred miles an hour! The therapist will then teach you how to relax your muscles -- which is incompatible with anxiety. After you practice that for a few days, you come back and you and the therapist go through your scenarios, one step at a time, making sure you stay relaxed, backing off if necessary, until you can finally imagine the tarantula while remaining perfectly tension-free.

This is a technique quite near and dear to me because I did in fact have a spider phobia, and did in fact get rid of it with systematic desensitization. It worked so well that, after one session (beyond the original scenario-writing and muscle-training session) I could go out an pick up a daddy-long-legs. Cool.

Beyond these fairly simple examples, shaping also accounts for the most complex of behaviors. You don’t, for example, become a brain surgeon by stumbling into an operating theater, cutting open someone’s head, successfully removing a tumor, and being rewarded with prestige and a hefty paycheck, along the lines of the rat in the Skinner box. Instead, you are gently shaped by your environment to enjoy certain things, do well in school, take a certain bio class, see a doctor movie perhaps, have a good hospital visit, enter med school, be encouraged to drift towards brain surgery as a speciality, and so on. This could be something your parents were carefully doing to you, as if you were a rat in a cage. But much more likely, this is something that was more or less unintentional.

**Aversive stimuli**

An **aversive stimulus** is the opposite of a reinforcing stimulus, something we might find unpleasant or painful.

*A behavior followed by an aversive stimulus results in a decreased probability of the behavior occurring in the future.*

This both defines an aversive stimulus and describes the form of conditioning known as **punishment.** If you shock a rat for doing x, it’ll do a lot less of x. If you spank Johnny for throwing his toys he will throw his toys less and less (maybe).

On the other hand, if you remove an already active aversive stimulus after a rat or Johnny performs a certain behavior, you are doing **negative reinforcement.** If you turn off the electricity when the rat stands on his hind legs, he’ll do a lot more standing. If you stop your perpetually nagging when I finally take out the garbage, I’ll be more likely to take out the garbage (perhaps). You could say it “feels so good” when the aversive stimulus stops, that this serves as a reinforcer!

*Behavior followed by the removal of an aversive stimulus results in an increased probability of that behavior occurring in the future.*

Notice how difficult it can be to distinguish some forms of negative reinforcement from positive reinforcement: If I starve you, is the food I give you when you do what I want a
positive -- i.e. a reinforcer? Or is it the removal of a negative -- i.e. the aversive stimulus of hunger?

Skinner (contrary to some stereotypes that have arisen about behaviorists) doesn’t “approve” of the use of aversive stimuli -- not because of ethics, but because they don’t work well! Notice that I said earlier that Johnny will maybe stop throwing his toys, and that I perhaps will take out the garbage? That's because whatever was reinforcing the bad behaviors hasn’t been removed, as it would've been in the case of extinction. This hidden reinforcer has just been “covered up” with a conflicting aversive stimulus. So, sure, sometimes the child (or me) will behave -- but it still feels good to throw those toys. All Johnny needs to do is wait till you’re out of the room, or find a way to blame it on his brother, or in some way escape the consequences, and he’s back to his old ways. In fact, because Johnny now only gets to enjoy his reinforcer occasionally, he's gone into a variable schedule of reinforcement, and he’ll be even more resistant to extinction than ever!

**Behavior modification**

**Behavior modification** -- often referred to as **b-mod** -- is the therapy technique based on Skinner’s work. It is very straight-forward: Extinguish an undesirable behavior (by removing the reinforcer) and replace it with a desirable behavior by reinforcement. It has been used on all sorts of psychological problems -- addictions, neuroses, shyness, autism, even schizophrenia -- and works particularly well with children. There are examples of back-ward psychotics who haven’t communicated with others for years who have been conditioned to behave themselves in fairly normal ways, such as eating with a knife and fork, taking care of their own hygiene needs, dressing themselves, and so on.

There is an offshoot of b-mod called the **token economy**. This is used primarily in institutions such as psychiatric hospitals, juvenile halls, and prisons. Certain rules are made explicit in the institution, and behaving yourself appropriately is rewarded with tokens -- poker chips, tickets, funny money, recorded notes, etc. Certain poor behavior is also often followed by a withdrawal of these tokens. The tokens can be traded in for desirable things such as candy, cigarettes, games, movies, time out of the institution, and so on. This has been found to be very effective in maintaining order in these often difficult institutions.

There is a drawback to token economy: When an “inmate” of one of these institutions leaves, they return to an environment that reinforces the kinds of behaviors that got them into the institution in the first place. The psychotic’s family may be thoroughly dysfunctional. The juvenile offender may go right back to “the ‘hood.” No one is giving them tokens for eating politely. The only reinforcements may be attention for “acting out,” or some gang glory for robbing a Seven-Eleven. In other words, the environment doesn’t travel well!

**Walden II**
Skinner started his career as an English major, writing poems and short stories. He has, of course, written a large number of papers and books on behaviorism. But he will probably be most remembered by the general run of readers for his book *Walden II*, wherein he describes a utopia-like commune run on his operant principles.

People, especially the religious right, came down hard on his book. They said that his ideas take away our freedom and dignity as human beings. He responded to the sea of criticism with another book (one of his best) called *Beyond Freedom and Dignity*. He asked: What do we mean when we say we want to be free? Usually we mean we don’t want to be in a society that punishes us for doing what we want to do. Okay -- aversive stimuli don’t work well anyway, so out with them! Instead, we’ll only use reinforcers to “control” society. And if we pick the right reinforcers, we will feel free, because we will be doing what we feel we want!

Likewise for dignity. When we say “she died with dignity,” what do we mean? We mean she kept up her “good” behaviors without any apparent ulterior motives. In fact, she kept her dignity because her reinforcement history has led her to see behaving in that "dignified" manner as more reinforcing than making a scene.

The bad do bad because the bad is rewarded. The good do good because the good is rewarded. There is no true freedom or dignity. Right now, our reinforcers for good and bad behavior are chaotic and out of our control -- it’s a matter of having good or bad luck with your “choice” of parents, teachers, peers, and other influences. Let’s instead take control, as a society, and design our culture in such a way that good gets rewarded and bad gets extinguished! With the right behavioral technology, we can design culture.

Both freedom and dignity are examples of what Skinner calls mentalistic constructs -- unobservable and so useless for a scientific psychology. Other examples include defense mechanisms, the unconscious, archetypes, fictional finalisms, coping strategies, self-actualization, consciousness, even things like hunger and thirst. The most important example is what he refers to as the homunculus -- Latin for “the little man” -- that supposedly resides inside us and is used to explain our behavior, ideas like soul, mind, ego, will, self, and, of course, personality.

Instead, Skinner recommends that psychologists concentrate on observables, that is, the environment and our behavior in it.

**Dollard and Miller: Psychoanalytic Learning/Stimulus Response Theory**

**General theory** is a translation of psychoanalytic theory into behavioristic language and depiction, so concepts could be tested in the laboratory. While Freud described aggression as being driven by internal libido, Dollard & Miller defined aggression as a behavior produced by reproducible stimulus situations (frustration or interruption of goal seeking.) Neurosis was not seen as ego being overwhelmed by internal conflicts, but as a failure to
make adaptive behaviors which could be studied as a learning failure, and as such, could be remedied with new learning. While the idea of translating Freud’s concepts into lab-ready conceptualizations sounds far-fetched, both behaviorism and psychoanalytic theory are deterministic in nature, so aren’t as far apart as one might think. It’s simply the determiners which are different in the 2 theories (Freudian- internal conflict between id and superego, and behaviorism- external conflict between different stimulus situations.)

Biographies

- **John Dollard** was born in Wisconsin in 1900. He earned a Ph.D. in sociology at University of Chicago and studied psychoanalysis at the Berlin Institute. He taught anthropology, psychology, & sociology at Yale. He individually researched the issues of race relations & social class, believing much can be predicted about a person if you understand the culture s/he was born into at the time. Social class determines a gamut of specific learning experiences.

- **Neal Miller** was born in Wisconsin in 1909 and his father was an educational psychologist. Miller earned a Ph.D. in psychology at Yale, studying with Clark Hull, who specialized in learning theory & drive reduction. When Miller joined the Institute of Human Relations at Yale, he began collaborating with Dollard, exploring ways to understand psychoanalytic theory using behaviorist techniques. Miller founded the Laboratory of Physiological Psychology at Rockefeller University in New York, where he worked on animal training. He particularly encouraged psychologists to collaborate with neuroscientists to better understand physiological mechanisms involved in motivation, learning, etc. Ultimately his work helped develop biofeedback, which is used today in numerous holistic health regimens for healing. He showed the autonomic nervous system functions like heart rate, gastric vascular responses, and blood pressure could be influenced by operant learning. In the past only classical conditioning was thought to be useful in managing biological functions. Miller received the Citation for Outstanding Lifetime Contribution to Psychology in 1992 from the APA. The citation especially noted his work in using animal models to understand social learning, pathology, health and other topics of interest to psychologists.

**Fundamental concepts about learning** – their concepts began with accepted behaviorist principles defined by Skinner and Pavlov, stating that “in order to learn one must want something notice something, do something, and get something.” As such they articulated the following 4 concepts to learning theory:

- **Drive:** Wanting something

  Freud described libido as the driving force in all activity, but D&M used the concept of drive, taken from Hull’s work using deprivation to produce drive in animals. Drive is a need- “a strong stimulus which impels action.” Drive stimuli can be **internal** (hunger or even thoughts) or **external** (inflation of pain, discomfort in
environment.) Drives are **primary** (natural responses to physical need or discomfort) or **secondary** (learned values for things associated with satisfaction or distress.) Different needs develop in different circumstances, which is why culture is important to understand. D&M believe ambition is fostered more powerfully in the middle class than the lower classes because of forces & models the middle class people are exposed to.

- **Cue: Noticing Something**

Cues are discriminative stimuli that are noticed at the time of behavior. They include sights, smells that may act as cues to a behavior. Even internal thoughts can act as cues. Cues determine “when he will respond, where, he will respond, and which response he will make.” Better learning means better connection between the cue and response- more accurate or rapid responses in the face of the cue. Cues can be entire behavior repertoires that indicate a response is necessary or expected. (Social cues are more ambiguous, which is why getting the right response from a partner can be tricky.)

- **Response: Doing something**

Responses are simply behaviors. Any behavior subject to change through learning is a response. They can be **overt** (voluntary physical behavior) or **covert** (hidden behavior such as thinking.) We choose our responses based on all the responses possible or useful in any situation- we develop a **response hierarchy**. The hierarchy ranges from the most likely response (**dominant response**) to less likely responses that occur when the dominant response is blocked somehow. Punishment of a dominant response will produce alternative responses, according to what the child thinks will most gratify him and least likely result in more punishment. So responses change their position in the hierarchy. When the hierarchy is revised, it’s called the **resultant hierarchy**. Rewards move responses up the hierarchy, and punishment/ extinction moves them lower.

- **Reward: Getting something**

Here is where D&M getting particularly psychoanalytic, suggesting that reward is impossible unless there is drive – here is the link to Freud’s libido. Rewards can be innate or learned.

**The Learning Process**

- **A learning dilemma** occurs in a situation in which the existing responses are not rewarded. If your dominant response always gets rewarded, there is no need for any learning. (Which is why the joke about the definition of insanity strikes a chord: Insanity is doing the same thing over and over with the expectation that you will get something different. If you are doing it over and over- it already must be rewarding
Learning occurs when your dominant response doesn’t get a reward- so you are motivated to try something different- giving you an opportunity to learn something new. When the new response gets a favorable reward, the new response will more likely occur again. There are ways to encourage a new response: rearranging the situation so the new response is more likely (often used in training children, especially children with emotional impairments), simplifying the situation, reducing cues for the negative responses (often used for distractible children), coaxing the desired response with desirable rewards described, & showing models of the desired response.

Undesirable responses can be eliminated by punishment, producing a change in the response hierarchy. This new behavior will occur more often if it is rewarded. But D&M also noticed a new phenomenon under punishment- spontaneous recovery. Children can change a behavior under punishment, but they often learn to return to the most preferred behavior under certain circumstances- such as when parents aren’t looking.

- **Extinction** occurs when a response is not rewarded. Teachers and parents often don’t understand why their ignoring of behaviors doesn’t effect change in children’s behavior, but they don’t count on how rewarding attention from siblings and other children is. Extinction only works if the behavior truly gets no rewarding response. Well-learned responses from the past are very resistant to extinction, and in children, they have more energy to pursue a desirable behavior than parents, teachers have to ignore it. Fear is a particularly resistant behavior pattern. It may diminish during extinction, but rarely ever is eliminated completely. This shows up in PTSD, when a single trauma gets relived over and over in the subject’s mind, reinforcing the scary experience, as well as the feelings of powerlessness. In real life, people rarely put themselves in the frightening situation again if they don’t have to- thereby avoiding the learning experience necessary to unlearn the fear. Powerful phobias develop in this way, as well as rituals to reduce the anxiety of obsessive thoughts. Avoidance is very rewarding.

- **Spontaneous recovery** occurs when an extinguished response recurs. They don’t last long, but they cause trainers, (and parents) some dismay. It represents the child’s testing of the environment- has the environment really changed, or might this behavior get a positive response again?

- **Stimulus generalization** is the transfer of a response pattern from one environment to another which offers similar cues. This is the reason we learn so effortlessly- our learning transfers easily when we recognize a past behavior could be useful in a new environment. It’s also a reason we develop phobias- a single bad experience can transfer to many things that trigger that fear again. It also accounts for fetishes- one satisfying sexual experience of slight pain associated with sexual satisfaction can morph into S&M rituals. It may also be why we unconsciously look for a partner that mirrors some aspect of a parent- Freud would be proud!
• **Discrimination** is the opposite of generalization - it means we recognize only certain cues are important to trigger a response. This is why some people do well on Multiple choice tests, and others, who know the general material, don’t do so well. They haven’t learned the critical cues associated with specific concepts. This was the learning experience of the neurotic dogs - they learned specific consequences that could be associated with the circle or oval - but when the stimuli began changing, their powers of discrimination were overwhelmed and they sank into neurosis.

• **Gradient of reward** states that the more closely the response is followed by reward, the more it is strengthened.

• **Gradient of punishment** states that the more immediately punishment follows misbehavior, the more effective it is in reducing the tendency to misbehave. These 2 gradients are the reason some parents are effective as authority figures, and others are not. Some parents are instantly responsive, as well as dependably consistent. Other parents lag in reward or punishment, and aren’t consistent in how they respond. Language also contributes to effective responses. When the child understands language, the parent can explain the problem with the behavior, & teach the child s/he must think about his/her behavior. The thinking will produce an expected consequence in the child’s mind which can control his/her behavior. It means the parental response becomes more immediate when the child can think about it, and when it is consistently applied. Talking about aspects of a child’s good behavior can be made more powerful, too, as it produces more immediacy due to language and thought. Parents will be more effective rewarders when they describe many aspects of what a child did well, not just generically praise the finished product.

• **Anticipatory responses** are responses that precede reward and occur earlier and earlier. Anticipation can produce very speedy responses in recurring environments. (Think Jeopardy!)

**Learning by imitation** was D&M’s attempt to understand Freud’s concept of identification. They described 3 processes of imitation:

• **Same behavior** is the production of the same behavior as a model - in the same circumstances, under the same cues as for the model.

• **Copying** occurs when the learner tries to produce the same behavior as the model, and understands there is a discrepancy between what the model is doing, and what the learner is doing. The behavior is being done for a past reward, not the same trigger as for the model. The cues for the learner are the model’s behavior, and the reward is recognition of similarity to the model. This also produces social conformity (Think in terms of college drinking deaths produced by pledges’ desire to belong to a group in which excessive drinking is learned and expected.)
• **Matched dependent behavior** is like copying, with a behavior learned from a model, but the response is cued by the model, not the situational cues the model has learned, and there is a different reward.

**Four Critical Training Periods of Childhood** – D&M liked Freud’s critical psychosexual conflicts depicted in 3 developmental stages, but they added a fourth- conflicts around anger.

• **Feeding** occurs upon birth and satisfies the hunger drive, so is inherently rewarding. The responses the infant makes before being fed become strengthened by the reward of food, and associations with feeding become secondary rewards- mother’s smell, touch, sounds of comfort, etc. If a child is left to cry when hunger, s/he loses the response of crying for food. These children go within and become very non-responsive, as you see in infants growing up in overcrowded orphanages, or with nonresponsive parents. Character traits of apathy or anxiety develop. When the child is appropriately responded to, the child develops love for parents, self-respect for one’s needs, and a more sociable personality, able to give and take, since there is no great anxiety about getting basic needs met interpersonally.

• **Cleanliness training**, as Freud described the anal stage, has to do with toilet training. This means the child must learn to override internal drives to empty his bladder/bowels at will, and develop complex behavior such as finding a bathroom, taking off clothes, getting on the toilet, and relieving oneself according to those specific situational cues. This is very complex behavior for a 2-year-old. If there is too much criticism or too high an expectation for training, the child may learn avoidance of the parent to avoid punishment (hiding to do it in the pants.) D&M suggest this stage be delayed until the child has enough language to produce mediating cues. Freud described anxiety/ guilt as producing the superego control. D&M do describe anxiety/ guilt as being related to this training if it is not done sensitively.

• **Early sex training** relates to Freud’s phallic stage, with the Oedipal conflict producing gender role behavior and moral behavior. D&M see this stage as also related to sexual training- as parents may punish children for masturbating when they explore their bodies. This produces anxiety around any sexual impulses. They favor a relaxed attitude around children’s explorations of their bodies, since too much control or criticism can set up fears of authority figures & inhibitions.

• **Anger-anxiety conflicts** were developed by D&M as a response to the inherent frustration of childhood. Frustration occurs in response to childhood dependency, limitations physically and mentally, & sibling control or antagonism. When frustrated, children first act out with aggression- public displays of anger. When they are punished, they learn to be anxious about anger. This produces self-control
around their angry impulses. If parents shut down anger too completely, however, they can render their children helpless in the face of reasonable provocation which should be stopped. These children don’t learn effective assertiveness which sets good boundaries with others who would take advantage of them. Anger can be effectively motivating in the right circumstances. If appropriate anger is not labeled or acknowledged, it can lead to repression or mislabeling—“I’m just tired.” Anger becomes conceptualized as bad, no matter how important it may be in the right circumstances. Guilt occurs whenever anger is felt. This really leaves a child without appropriate responses in many situations. Children need to have anger described to them and to learn how to use this powerful emotion responsibly.

**Conflict** according to Freud was what produced aspects of personality. D&M wanted to better understand conflict in learning terms. They related conflict to situational cues, not internal fights between the id and superego.

- **Gradient of approach**—these gradients reflect the strength of the tendency to make a response, according to distance from the goal. When there are 2 responses, with different gradients toward a goal, people can be paralyzed by choice. The gradient of approach is when the tendency to approach a goal is stronger the nearer the subject is to the goal. (Getting more and more excited, the closer the wedding gets.)

- **Gradient of avoidance** is when the tendency to avoid a feared stimulus is stronger the nearer the subject gets to it. Canceling a job interview the day of the interview, because you fear being rejected.) The gradient of avoidance is steeper than that of approach. And an increase in drive raises the height of the entire gradient.

**Four Types of Conflict**—distance can refer to physical distance from a goal, or time distance from an event. Activities can seem easier at a distance than as you approach them in time or space.

- **Approach-avoidance conflict** is when the same goal produces feelings of approach and avoidance. The gradient to approach is less steep than the one to avoid, so in the distance, approach is more likely to be felt, but as one gets closer to the conflicted event, avoidance may become predominate. Anxiety is worst, most disabling at the cross point of the 2 gradients. (Engaged people who were happy with impending marriage until the day or week before the wedding, experience strong internal conflict. Similarly, people feel the most intense anxiety when contemplating divorce the closer they get to filing the papers and telling the spouse of their plans.)

- **Avoidance-avoidance conflict** offers 2 goals and both are undesirable. This was the conflict of Sophie’s choice give up your daughter or son to be executed. She never got over her guilt for making a choice. In general, goals that are equally difficult to embrace produce immobilization, procrastination if possible, or escape. Children raised in punitive environments where they have little means of getting
positive attention, will run away from home. Staying produces only pain, no matter what they do.

- **Approach-approach conflict** is generally a day in the park- 2 positive goals only represent choosing the one you think offers the most pleasure. There is some anxiety at the choice point of the gradients, but it is rarely disabling. There is a point where you try to envision which goal will be most satisfying, or is there is an unexpected gain or negative possibility of one or the other, but usually these people have a history of success, so they see either goal as ultimately satisfying. (You got acceptances to 3 Ivy League schools- Oh, the challenge of choice!) Moving toward either tends to tip the balance of choice in that direction.

- **Double approach-avoidance conflict** occurs when 2 choices have both desirable and undesirable aspects. The closer the person is to the various goals, the more the avoidance gradient looms. Making one choice triggers its avoidance gradient, and the thought recurs that the other choice might be better. Often people stay stuck in a limbo of indecisiveness, doing nothing to promote one or the other- ultimately allowing life to remove one of the choices, as it will do. (The most powerful aspect of the book, Overcoming Indecisiveness, was the last paragraph which stated- just know that most choices you make can be undone. Very few choices are set in concrete and can’t be overridden. This is also one of the reasons that Bush’s and Clinton’s lies have been compared- Bush’s cost lives, Clinton’s did not. You can’t come back from choices that cost lives.)

- **Reducing conflict** can be facilitated by keeping a certain distance from the situations that produce anxiety, so the person can continue past the avoidance gradient to continue pursuing the goal. This can occur through therapy, or by using tranquilizing drugs, even alcohol. Tranquilizers, especially alcohol, can disengage inhibitions, however, which put people at risk sometimes.

**Frustration and aggression** is the area D&M made the most impact. They differed with Freud on aggression as due to libidinal impulses restrained by social conventions, however. They explained aggression as purely the result of frustration, blocking of one’s goals, not a death instinct.

**The Frustration-Aggression Hypothesis** described aggression as the result of frustration, which occurs when obstacles interfere with drive reduction.

Aggression is defined as behavior intended to harm another. Aggression is more likely when the drive is strong, or the interference is more complete, or when the frustration is repeated. (Sometimes seen in victims of domestic abuse finally rebelling with extreme violence against the perpetrator, leading to his death.) This can also be applied to frustrations during adolescence as a result of frustrated and increasing sexual drives, or to those in poverty who experience more crime. Many manifestations of frustration and outburst of aggression have been studied in the lab to ascertain what circumstances especially lead to aggression.
• Modifications to the frustration-aggression hypothesis

  o **Learning responses to frustration** - there are various responses to frustration, and aggression is only one. Based on past experience, it will be higher or lower on the response hierarchy. Aggressive responses are learned as a response to frustration, as are the forms of aggression.

  o **Displacement and catharsis** - aggression can be displaced to another target, especially if the target of frustration is too threatening to confront. People who are closer to the target in some ways will more likely elicit an aggressive response. (Stimulus generalization) But displaced aggression doesn't fully reduce the aggressive drive. Freud suggested that catharsis-acting on the rage- can reduce aggression. Research has not found that to be so - in more competitive games, more aggression is triggered than reduced.

  o **Hostile aggression and instrumental aggression**
    - Hostile aggression is aggression with the goal of injuring another.
    - Instrumental aggression is aggression in service of a goal- kids fighting over a toy, or access to the TV.

  o **Aggressive cues** trigger aggressive behaviors. This has been seen when people are exposed to violent media, games, especially when the perpetrators suffer no consequences for their violence. This also reduces inhibitions to violence.

  o **The role of emotion** is powerful, as aggression is often a response to a cascade of varied negative emotions such as embarrassment, fears, disappointment, depression and physical pain. (It has been said there are really only 2 emotions- love and fear, and all the negative emotions that we see are masks for fear.) Some people are more tightly wound, with a lower boiling point based on past experiences of threat or challenge. Bullies in school often have a hostile world view, seeing others as representing threats to themselves. They justify their own aggressive behavior as defenses to what they expect from others. This paranoia and suspiciousness triggers them to scan the environment for cues of others’ threat, so they can protect themselves by getting the jump on the others. D&M also thought aggressiveness could be triggers by anxiety about death (which would support Freud’s idea about death instincts driving aggression.) The closer we are to considering our own deaths, the more we consider violence as a response. When a leader tries to get the populace to consider going to war, s/he will use emotional appeals to one’s fear of death. When we are acting rationally, we make less aggressive choices. When we fear for our lives, we allow much unjustified violence in the guise of self-protection. (Lynching of blacks in the antebellum South, profiling criminals, dispensing of civil rights
for people we decide are terrorists, whether there is a shred of evidence or any legal justification at all.)

**Individual differences in aggressive responses** result from a variety of differences:

- A failure of ego development that allows aggression to get out of control.
- Problems with early attachment, so lack of development of empathy for others.
- Childhood physical abuse, which desensitizes some children to the effects of pain in themselves and others.
- People with fragile self-esteem, who when challenged may be violent in response to threats to the ego. Aggression is a response to a narcissistic wound. (Object relations theorists, who spun off Freud, suggested this, too.) One particularly powerful threat is a threat to masculinity, which can produce violence against female partners or homosexuals. (Laramie case.)

**Language** provides discriminative cues for learning how to deal with situations. When we have self-control, it often comes in the form of self-talk. Those who may not have the same self-control, often have not had emotional experiences appropriately labeled. So unlabeled emotional experiences go underground, into the unconscious. Language enables faster learning, as children develop insight into their own motivations and outcomes of their behaviors. Language also facilitates generalization of learning from one situation to the next. Self-control particularly generalizes. Language also enables problem-solving skills using reason and planning. People can imagine solutions and outcomes without having to painstakingly endure the experience to see how it works out. Symbolic trial and error techniques enable faster problem solving. Misleading language also slows or misdirects problem solving, as when social problems are labeled to target a group, rather than targeting the inherent inequities. (1984 is being cited as this administration uses terms such as the Clean Water Initiative, which allows more arsenic to go into the water, or the Healthy Forests Initiative, which allows for more clear-cutting of our national forests.)

**Neurosis** is due to maladaptive learning. Fear, conflict, and repression play a role in this development. D&M called neurosis the stupidity-misery syndrome, but we more likely call it today learned helplessness. Many neuroses can be explained as learned ways to avoid anxiety. Phobias develop when a scary experience is not confronted, and generalizes to produce fears in similar situations. So avoidance kicks in, and the fear grows in power. Compulsions also result when anxieties provoke obsessive thoughts. The compulsive hand-washing diminishes the fear around contamination, so it is internally emotionally reinforced. Regression is a response produced in an earlier developmental period, called up later, when more dominant, age-appropriate behaviors are blocked by fear, etc. The book gives a good example of a toddler with a new sibling, who is no longer getting the same positive attention from parents for good behavior, regressing to baby talk or wetting the pants, to get parental attention again. The recently learned positive behavior drops in the hierarchy when it is no longer reinforced. Displacement is emotion displaced toward a substitute target. Attraction to a partner may be based on his/her subtle similarity to a
parent. This can result in repeated victimization later in life, or perpetual childlikeness by finding a partner who will act as a parent.

**Psychotherapy** - if neuroses are learned, they can be unlearned through therapy (if you have enough patience!) Often the therapeutic situation is considered a place for safe reenactment of childhood issues, where the patient can act powerful and overcome his/her feeling of helplessness. Successful requires drive reduction to be rewarding and motivating, so people should be fairly miserable when they enter therapy. (I always felt that people made more changes due to unmitigating misery than anything I ever said. The quote by Anais Nin says it all, “And the day came when the risk to remain tight in a bud was more painful than the risk it took to blossom.”) D&M thought the effective therapist would use approval strategically to reward healthier aspects of a patient’s function- “The therapist...makes the patient work for approval” and the therapist offers a safe environment for the patient to express feared material without punishment. Approval and permissiveness should be dispensed according to effective learning principles in a timely fashion. They believed though, that most therapists weren’t very conscious and consistent in offering these behavior responses. The other benefit of therapy is that when fear is extinguished, creativity can rise higher in the response hierarchy. People often make serious changes in their lives and choices once they overcome their fears. Often their partners are completely undone by these changes, as neither the patient nor the partner saw these changes coming. (As my mentor in grad school said, 70% of people who get a Ph.D. get divorced!) Creativity comes in a variety of new choices that are available to conscious control. No longer do people just react to their lives, they begin creating them anew. D&M also stressed that therapy can’t ignore life circumstances- social class opens real doors in life or closes them.

**Suppression** is willful control of thinking- putting thoughts out of consciousness. D&M recommended that therapists teach this skill, but research shows that suppression is counterproductive, as the thought or feeling will erupt later more powerfully. Suppression may be related to depression, PTSD, physical pain, & a weak immune system. People often suppress their values when they desire to join a group of people with different values. This may be seen in an increase or decrease of prejudice, or excessive drinking or drug use to fit in. The White Bear Suppression Inventory was named for the task of “avoid thinking of a white bear.” Scores on this inventory correlates with obsessive thoughts, depression, and anxiety. When people try to suppress a thought, it usually comes back later with greater intensity. All sorts of environmental stimuli can trigger this rebound effect. Allowing suppressed thoughts to be expressed prevents the rebound effect. (This is certainly Freudian in nature, as he thought most of our unconscious was repressed urges and thoughts.) Even suppression of amusement, happy expressions puts greater strain on the sympathetic nervous system. Not only does this impair the immune system, it also impairs thought and memory. We don’t remember incidents as well when we were under emotional constraint at the time of learning. Expressing emotions through writing has positive health benefits, enhancing the immune system.
Albert Bandura: Social Learning Theory

Albert Bandura (born December 4, 1925, in Mundare, Alberta, Canada) is a psychologist and the David Starr Jordan Professor Emeritus of Social Science in Psychology at Stanford University. Over a career spanning almost six decades, Bandura has been responsible for groundbreaking contributions to many fields of psychology, including social cognitive theory, therapy and personality psychology, and was also influential in the transition between behaviorism and cognitive psychology. He is known as the originator of social learning theory and the theory of self-efficacy, and is also responsible for the influential 1961 Bobo Doll experiment.

A 2002 survey ranked Bandura as the fourth most-frequently cited psychologist of all time, behind B.F. Skinner, Sigmund Freud, and Jean Piaget, and as the most cited living one. Bandura is widely described as the greatest living psychologist, and as one of the most influential psychologists of all time.

In 2008 Bandura won the Grawemeyer Award in Psychology.

Research

Bandura was initially influenced by Robert Sears’ work on familial antecedents of social behavior and identificatory learning, Bandura directed his initial research to the role of social modeling in human motivation, thought, and action. In collaboration with Richard Walters, his first doctoral student, Bandura engaged in studies of social learning and aggression. Their joint efforts illustrated the critical role of modeling in human behavior and led to a program of research into the determinants and mechanisms of observational learning.

Social Learning Theory

The initial phase of Bandura’s research analyzed the foundations of human learning and the propensity of children and adults to imitate behavior observed in others. (It is a common mistake, even among psychologists, to confuse the words 'imitate' and 'model.' For example, a child patterns, but does not 'model' his behavior after someone else; he displays or imitates new behavior acquired by observing a model.)

Analysis of aggression

Bandura’s research with Walters led to his first book, Adolescent Aggression in 1959, and to a subsequent book, Aggression: A Social Learning Analysis in 1973. During a period dominated by behaviorism in the mold of B.F. Skinner, Bandura believed the sole behavioral modifiers of reward and punishment in classical operant conditioning were inadequate as a framework, and that many human behaviors were learned from other humans. Bandura began to analyze means of treating unduly aggressive children by identifying sources of violence in their lives. Initial research in the area had begun in the
1940s under Neal Miller and John Dollard; Bandura’s continued work in this line eventually culminated in the Bobo doll experiment, and in 1977’s enormously influential treatise, Social Learning Theory. Many of Bandura’s innovations came from his focus on empirical investigation and reproducible investigation, which were alien to a field of psychology dominated by the theories of Freud.

**The Bobo Doll experiment**

In 1961 Bandura conducted a controversial experiment known as the Bobo doll experiment, to study patterns of behavior, at least in part, by social learning theory, and that similar behaviors were learned by individuals shaping their own behavior after the actions of models. The experiment was criticized by some on ethical grounds, for training children towards aggression. Bandura’s results from the Bobo Doll Experiment changed the course of modern psychology, and were widely credited for helping shift the focus in academic psychology from pure behaviorism to cognitive psychology. The experiment is among the most lauded and celebrated of psychological experiments.

**Social cognitive theory**

By the mid-1980s, Bandura's research had taken a more holistic bent, and his analyses tended towards giving a more comprehensive overview of human cognition in the context of social learning. The theory he expanded from social learning theory soon became known as social cognitive theory.

**Social Foundations of Thought and Action**

In 1986, Bandura published Social Foundations of Thought and Action: A Social Cognitive Theory (see article), in which he reconceptualized individuals as self-organizing, proactive, self-reflecting, and self-regulating, in opposition to the orthodox conception of humans as governed by external forces. Bandura advanced concepts of triadic reciprocity, which determined the connections between human behavior, environmental factors, and personal factors such as cognitive, affective, and biological events, and of reciprocal determinism, governing the causal relations between such factors. Bandura’s emphasis on the capacity of agents to self-organize and self-regulate would eventually give rise to his later work on self-efficacy.

**Self-efficacy**

In 1963 Bandura published Social Learning and Personality Development. In 1974 Stanford University awarded him an endowed chair and he became David Starr Jordan Professor of Social Science in Psychology. In 1977, Bandura published the ambitious Social Learning Theory, a book that altered the direction psychology took in the 1980s.

In the course of investigating the processes by which modeling alleviates phobic disorders in snake-phobics, Bandura found that self-efficacy beliefs (which the phobic individuals had in their own capabilities to alleviate their phobia) mediated changes in behavior and in
fear-arousal. He then launched a major program of research examining the influential role of self-referent thought in psychological functioning. Although he continued to explore and write on theoretical problems relating to myriad topics, from the late 1970s he devoted much attention to exploring the role that self-efficacy beliefs play in human functioning.

In 1986 Bandura published Social Foundations of Thought and Action: A Social Cognitive Theory (see article), a book in which he offered a social cognitive theory of human functioning that accords a central role to cognitive, vicarious, self-regulatory and self-reflective processes in human adaptation and change. This theory has its roots in an agentic perspective that views people as self-organizing, proactive, self-reflecting and self-regulating, not just as reactive organisms shaped by environmental forces or driven by inner impulses. Self-efficacy: The exercise of control was published in 1997.

Social learning theory

Theory

Social learning theory is derived from the work of Albert Bandura which proposed that social learning occurred through four main stages of imitation:

- close contact,
- imitation of superiors,
- understanding of concepts,
- role model behavior

For the article on social learning theory in psychology and education see social cognitive theory. It consists of three parts: observing, imitating, and reinforcements

Julian Rotter moved away from theories based on psychosis and behaviorism, and developed a learning theory. In Social Learning and Clinical Psychology (1954), Rotter suggests that the effect of behavior has an impact on the motivation of people to engage in that specific behavior. People wish to avoid negative consequences, while desiring positive results or effects. If one expects a positive outcome from a behavior, or thinks there is a high probability of a positive outcome, then they will be more likely to engage in that behavior. The behavior is reinforced, with positive outcomes, leading a person to repeat the behavior. This social learning theory suggests that behavior is influenced by these environmental factors or stimulus, and not psychological factors alone.

Albert Bandura (1977) expanded on Rotter's idea, as well as earlier work by Miller & Dollard (1941), and is related to social learning theories of Vygotsky and Lave. This theory incorporates aspects of behavioral and cognitive learning. Behavioral learning assumes that people's environment (surroundings) cause people to behave in certain ways. Cognitive learning presumes that psychological factors are important for influencing how one behaves. Social learning suggests a combination of environmental (social) and psychological factors influence behavior. Social learning theory outlines three
requirements for people to learn and model behavior include attention: retention (remembering what one observed), reproduction (ability to reproduce the behavior), and motivation (good reason) to want to adopt the behavior.

**Criminology**

In criminology, Ronald Akers and Robert Burgess (1966) developed social learning theory to explain deviancy by combining variables which encouraged delinquency (e.g. the social pressure from delinquent peers) with variables that discouraged delinquency (e.g. the parental response to discovering delinquency in their children).

The first two stages were used by Edwin Sutherland in his Differential Association Theory. Sutherland’s model for learning in a social environment depends on the cultural conflict between different factions in a society over who has the power to determine what is deviant. But his ideas were difficult to put into operation and measure quantitatively. Burgess, a behavioral sociologist, and Akers revised Sutherland’s theory and included the idea of reinforcement, which increases or decreases the strength of a behavior, and applied the principles of Operant Psychology, which holds that behavior is a function of its consequences and can be really bad in some cases (Pfohl, 1994).

Functionalism had been the dominant paradigm but, in the 1960s, there was a shift towards Social Control Theories, Conflict Criminology, and Labeling Theories that tried to explain the emerging and more radical social environment. Moreover, people believed that they could observe behavior and see the process of social learning, e.g., parents watched their own children and saw the influence of other children on their own; they could also see what kind of effect they had on their own children, i.e. the processes of differential association and reinforcement. The conservative political parties were advocating an increase in punishment to deter crime. Unlike Labeling Theory, Social Learning Theory actually supports the use of punishment which translates into longer sentences for those convicted, and helps to explain the increase in the prison population that began in the early 1970s (Livingston, 1996).

Unlike situational crime prevention, the theory ignores the opportunistic nature of crime (Jeffery, 1990: 261-2). To learn one must first observe criminal behavior, but where was this behavior learned? The theory does explain how criminal behavior is ‘transmitted’ from one person to another, which can explain increases in types of crimes, but it does not consider how criminal acting can be prevented (Jeffery, 1990: 252) although it may be fairly assumed that the processes of learning behaviors can be changed.

There is also a definite problem. What may be reinforcement for one person may not be for another. Also, reinforcements can be both social involving attention and behavior between more than one person, and non-social reinforcement would not involve this interaction (Burgess & Akers: 1966) Social Learning Theory has been used in mentoring programs that should, in theory, prevent some future criminal behavior. The idea behind mentoring programs is that an adult is paired with a child, who supposedly learns from the behavior of the adult and is positively reinforced for good behavior (Jones-Brown, 1997). In the
classroom, a teacher may use the theory by changing the seating arrangements to pair a behaving child and a misbehaving child, but the outcome may be that the behaving child begins not satisfying

**Serial Murder and Social Learning Theory**

Hale (1993) applied the social learning theory to serial murder using Amsel's frustration theory. In frustration theory, humiliation is the result of a nonreward situation, which is a reward that is not given when a reward had been given in the past. When an individual is conditioned to be rewarded they anticipate it to happen in the future, but when they are presented with a nonreward situation this creates an unconditioned frustration response, otherwise called humiliation. Signs associated with the humiliating experience form a conditioned anticipatory frustration response, which triggers specific internal stimuli. These stimuli prevent an individual from future humiliation. During childhood, serial killers experience many humiliating situations and with unbalanced nonreward situations and no reward situations, they perceive all situations as nonreward and develop the inability to distinguish between the two. They anticipate humiliation in every encounter that they come across. When it comes to choosing their victims serial killers do not go back to the person who caused the humiliation. According to Dollard and Miller's (1939, 1950) theory of learning, the individual is "instigated" toward a behavior, which is some antecedent condition of which the predicted response is the consequences. For a serial killer, frustration gets in the way of an instigated goal and their built up aggression must be released. Their behavior is seen as a delayed and indirect release of aggression. They are unable to release their aggression on their source of frustration and are forced to choose more vulnerable individuals to act on (Singer and Hensley, 2004). The child learns to expect humiliation or a negative situation from the past, which then causes frustration or aggression. Jerome Henry Brudos felt he was never accepted by his mother. Brudos transferred his hatred for his mother to other women through his mutilation of their bodies. For Brudos, the murder of strange women served as a catharsis for the humiliation he endured through his mother's rejection (Hale, 1993). In all of these instances the serial killer was presented with some form of humiliation as a child, and learned to vent their anger through aggression.

**Applications**

The applications of social learning theory have been important in the history of education policies in the United States. The zone of proximal development is used as a basis for early intervention programs such as Head Start. Social learning theory can also be seen in the TV and movie rating system that is used in the United States. The rating system is designed to let all parents know what the programs that their children are watching contain. The ratings are based on age-appropriate material to help parents decide if certain content is appropriate for their child to watch. Some content may be harmful to children who do not have the cognitive ability to process certain content, however the child may model the behaviors seen on TV.
Locus of Control is an important consideration when helping students in higher education environments perform better academically. Cassandra B. Whyte indicated in the 1970s and 1980s that by encouraging students to accept personal responsibility for their educational outcomes, better academic performance will usually be forthcoming if ability levels are present. More frequent successful academic performance will result as thoughts and belief in the need for personal effort toward the academic task is rewarded. As successful experiences increase in frequency, the student usually incorporates the confidence that hard work often can be rewarded with positive academic outcomes.

Guided participation is seen in schools across the United States and all around the world in language classes when the teacher says a phrase and asks the class to repeat the phrase. The other part to guided participation is when the student goes home and practices on their own. Guided participation is also seen with parents who are trying to teach their own children how to speak.

Portraiture is another technique that is used widely across the United States. Most academic subjects take advantage of portraiture, however mathematics is one of the best examples. As students move through their education they learn skills in mathematics that they will build on throughout their scholastic careers. A student who has never taken a basic math class and does not understand the principles of addition and subtraction will not be able to understand algebra. The process of learning math is a portraiture technique because the knowledge builds on itself over time.

**Bobo doll experiment**

The Bobo doll experiment was the name of two experiments conducted by Albert Bandura in 1961 and 1963 studying patterns of behavior associated with aggression.

Bandura hoped that the experiments would prove that aggression can be explained, at least in part, by social learning theory. The theory of social learning would state that behavior such as aggression is learned through observing and imitating others.

The experiments are important because it sparked many more studies on the effects of violent media on children.

**Method (1961)**

The subjects studied in the experiment involved 36 boys and 36 girls from the Stanford University Nursery School ranged between the ages of 3 and 6. The total of 72 children were split into 3 groups of 24. One group was put into an aggressive model scenario with half of that group observing a same-sex adult model and half observing a different-sex adult model. Another group was exposed to a non-aggressive adult model and the final group would be used as a control group and would not be exposed to any adult model at all. The children were pre-selected and sorted to ensure an even spread of personality types across
the test groups. Some of these children were already known to be more aggressive than others.

**Aggressive adult model scenario (24 children)**
- Same-sex adult model
- Different-sex adult model

**Non-aggressive adult model (24 children)**
- Same-sex adult model
- Different-sex adult model

**Control Group (24 children)**

For the experiment, each child was exposed to the scenario individually, so as not to be influenced or distracted by classmates. The first part of the experiment involved bringing a child and the adult model into a playroom. In the playroom, the child was seated in one corner filled with highly appealing activities such as stickers and stamps. The adult model was seated in another corner containing a toy set, a mallet, and an inflatable Bobo doll. Before leaving the room, the experimenter explained to the child that the toys in the adult corner were only for the adult to play with.

During the aggressive model scenario, the adult would begin by playing with the toys for approximately one minute. After this time the adult begins to show aggression towards the Bobo doll. Examples of this include hitting the Bobo doll and using the toy mallet to hit the Bobo doll in the face. After a period of about 10 minutes, the experimenter came back into the room, dismissed the adult model, and took the child into another playroom. The non-aggressive adult model simply played with the small toys for the entire 10 minute-period. In this situation, the Bobo doll was completely ignored by the model then the child was taken out of the room.

The next stage placed the child and experimenter into another room filled with interesting toys: a truck, dolls, and spinning top. There, the child was invited to play with the toys. After about 2 minutes the experimenter decides that the child is no longer allowed to play with the toys. This was done to build up frustration. The experimenter says that the child may play with the toys in the experimental room including both aggressive and non-aggressive toys. In the experimental room the child was allowed to play for the duration of 20 minutes while the experimenter evaluated the child’s play.

The first measure recorded was based on physical aggression. This included punching or kicking the Bobo doll, sitting on the Bobo doll, hitting it with a mallet, and tossing it around the room. Verbal aggression was the second measure recorded. The judges counted each time the children imitated the aggressive adult model and recorded their results. The third measure was the amount of times the mallet was used to display other forms of aggression than hitting the doll. The final measure includes modes of aggression shown by the child that were not direct imitation of the role-model’s behavior.

**Results (1961)**
Bandura found that the children exposed to the aggressive model were more likely to act in physically aggressive ways than those who were not exposed to the aggressive model. For those children exposed to the aggressive model, the number of imitative physical aggressions exhibited by the boys was 38.2 and 12.7 for the girls.

The results concerning gender differences strongly supported Bandura's prediction that children are more influenced by same-sex models. Boys exhibited more aggression when exposed to aggressive male models than boys exposed to aggressive female models. When exposed to aggressive male models, the number of aggressive instances exhibited by boys averaged 104 compared to 48.4 aggressive instances exhibited by boys exposed to aggressive female models.

While the results for the girls show similar findings, the results were less drastic. When exposed to aggressive female models, the number of aggressive instances exhibited by girls averaged 57.7 compared to 36.3 aggressive instances exhibited by girls exposed to aggressive male models.

Bandura also found that the children exposed to the aggressive model were more likely to act in verbally aggressive ways than those who were not exposed to the aggressive model. The number of imitative verbal aggressions exhibited by the boys was 17 times and 15.7 times by the girls. In addition, the results indicated that the boys and girls who observed the nonaggressive model exhibited far less non-imitative mallet aggression than in the control group, which had no model.

The experimenters came to the conclusion that children observing adult behavior are influenced to think that this type of behavior is acceptable thus weakening the child's aggressive inhibitions. The result of reduced aggressive inhibitions in children means that they are more likely to respond to future situations in a more aggressive manner.

Lastly, the evidence strongly supports that males have a tendency to be more aggressive than females. When all instances of aggression are tallied, males exhibited 270 aggressive instances compared to 128 aggressive instances exhibited by females.

**Critique**

Hogben and Byrne stressed on the importance of onfoundations of social learning in place of tangibly measureable rewards. Reward is eminent to the Social Learning theory of aggression as innately we would repeat an action or behavior after receiving a desirable reinforcement. Unless the children were rewarded for their emulation of attacking the 'bobo doll' or the clown would become a personal habit to exert aggression? The experiment was also biased in several areas which weakened the internal validity.

**1. Selection bias**

Bandura's subjects were all from the nursery of Stanford University. During the 1960s, the opportunity of studying in a university, especially one as prestigious as Stanford was a
privilege that only the upper-middle class whites had. Besides, the racial bias and economic status of the whites and blacks were still very vast at that time. Generally only the upper-middle class and rich whites were able to afford putting their children in a nursery. Thus, the subjects would turn out to be mostly white and of similar backgrounds.

2. Unclear history of subjects

The ethnicities of the subjects were never documented but Bandura and his colleagues made sweeping statements on their findings when explaining the aggression and violence trait among subgroups and lower socioeconomic communities.

3. Ambiguous temporal sequence

As the data of the “real life aggression and control group conditions came from their 1961 study”, parallel ongoing events including the mental maturation of the subjects could have been confused with the observations and results of the 1963 study.

Bar-on, Broughton, Buttrross, Corrigan, et al. (2001) explained that the underdeveloped frontal lobe of children below the age of 8 causes them to be unable to separate reality from fantasy. As an example, children up to the age of 12 believe that there are monsters in their closet or under the bed. They are also sometimes unable to distinguish dreams from reality.

Furthermore, biological theorists argue that the social learning theory completely ignores individual's biological state by ignoring the uniqueness of an individual's DNA, brain development, and learning differences.

According to Worthman and Loftus (1992), Bandura's study was unethical and morally wrong as the subjects were manipulated to respond in an aggressive manner. They also find it to be no surprise that long-term implications are apparent due to the methods imposed in this experiment as the subjects were taunted and were not allowed to play with the toys and thus incited agitation and dissatisfaction. Hence, they were trained to be aggressive.

Although there have been other research which glamorized the effects of violent movies and video games such as Plagens et al.'s 1991 study on violent movies, “Feshbach and R.D. Singer believed that television actually decreases the amount of aggression in children” (Islam, 1998) - Catharsis effect. A study was made on juvenile boys for six weeks. Half were made to view violent movies throughout the period of six weeks while another half viewed non-violent movies for six weeks. The boy's behavior was then observed and the result was boys who viewed violent movies were less aggressive than those who viewed non-violent movies. The conclusion drawn by Feshbach and Singer was that those who viewed violent movies were less aggressive as they were able to transmit all their feelings and thoughts of aggression into the movie.
Variations of the 'Bobo doll' experiment

Due to numerous criticisms, Bandura replaced the ‘Bobo doll’ with a live clown. The young woman beat up a live clown in the video shown to preschool children and in turn when the children were lead into another room where they found a live clown, they imitated the action in the video they had just watched.

Variation 1:

In Friedrich and Stein (1972)’s ‘The Mister Rogers’ study:

Procedures: A group of preschoolers watched Mister Rogers every weekday for four consecutive weeks.

Result: Children from lower socioeconomic communities were easier to handle and more open about their feelings.

Variation 2:

Loye, Gorney & Steele (1977) conducted variation of the ‘Bobo Doll’ Experiment using 183 married males aged between 20 to 70 years old.

Procedure: The participants were to watch one of five TV programs for 20 hours over a period of one week while their wives secretly observed and recorded their behavior; helpful vs. hurtful behaviors when not watching the program.

Result: Participants of violent programs showed significant increase in aggressive moods and “hurtful behavior” while participants who viewed pro-social programs were more passive and demonstrated a significant increase of “emotional arousal”.

Variation 3:

Black and Bevan’s research (1992) had movie-goers fill out an aggression questionnaire either before they entered the cinema and after the film; a violent film and a romantic film.

Procedure: Subjects were randomly selected as they went to view violent and romantic film. They were asked to fill out pretest and posttest questionnaires on their emotional state.

Result: Those who watched violent films were already aggressive before viewing the film but it was aggravated after the viewing while there was no change in those who viewed romantic films.

Variation 4:
Numerous research done using violent video games have also led to aggressive behaviors. Anderson & Dill (2000) randomly assigned college students to play two games; Wolfenstein, a science fiction first-person shooter game and Tetris. At the end of the games, those who played Wolfenstein showed more aggressive thoughts and feelings than those who played Tetris.

**Discussion**

Bandura’s Bobo Doll Experiment showed that aggressive behaviors may be learned through observation, for instance children will imitate an adults aggressive behavior. This can result in a child using aggression to solve future problems. It was also shown that aggression is considered a male trait, in today’s society male aggression is seen as acceptable and in turn in praised. Girls, not confident of displaying physical aggression, almost matched the boys in Bandura’s experiments in terms of verbal aggression.

From this experiment, Bandura established that there are 4 processes that are apparent in the modeling process

1. **Attention**

   One has to be paying attention and not distracted to be able to absorb knowledge. Physical factors such as being tired, having a hangover, being sick, nervous, extremely excited or distracted by a competing stimuli would mar one’s focus on a subject. For example, when a student is in love, he or she would only be thinking of his/her loved one. All else is a blur; hear but not listening, see but not looking, eat but not tasting, breathing but not smelling and so on.

2. **Retention**

   The proof that one has been paying attention is when one is able to remember the intended stimuli. Imagery and language play a great part here. Memory is stored in “the form of mental images or verbal descriptions.” Once it is stored, the memory can be recalled later and be replicated in one’s actions and behavior.

3. **Reproduction**

   This stage of modeling another requires one to have the ability to duplicate the action or/and behavior. A wheelchair bound person would not be able to duplicate a person doing cartwheels but one who is able to use all their limbs might be able to improve their cartwheel techniques after watching the video of a gymnast doing cartwheels. Similarly, after acquiring the ability to draw, one can improve their skills by watching an expert drawing or by emulating the instructions in a drawing book.

   However, this does not mean that day-dreaming is useless. It in fact plays a part in refining our skills. “Our abilities improve even when we just imagine ourselves performing!
Many athletes, for example, imagine their performance in their mind’s eye prior to actually performing.”

4. Motivation

a. Nonetheless, the most important part of the modeling process is motivation! If one is not motivated to emulate an action or behavior, attention would not be there to start with. According to Bandura, there are two categories of motives - positive [Past reinforcements, Promised reinforcements and Vicarious reinforcements] and negative [Past punishment, Promised punishment and vicarious punishment] both of which are based on traditional behaviorism such as BF Skinner’s Operant Conditioning and Pavlov’s Classical Conditioning.

However, there are as many experiments conducted which support as well as nullify Bandura’s hypothesis. So far, all the variations of Bandura’s Bobo Doll Experiment have only focused on a maximum of three important factors; a combination of background, personal temperament, environment, interpersonal and intrapersonal relationships. Yet, a pretest of phobias and daily mood assessment were not assessed before the experiment. Thus, we can safely say that until an experiment takes all the factors into consideration and conducts a longitudinal assessment, Bandura’s hypothesis is still on the fence.

Self-efficacy

Self-efficacy is a term used in psychology, roughly corresponding to a person’s belief in their own competence.

It has been defined as the belief that one is capable of performing in a certain manner to attain certain goals. It is believed that our personalized ideas of self-efficacy affect our social interactions in almost every way. Understanding how to foster the development of self-efficacy is a vitally important goal for positive psychology because it can lead to living a more productive and happy life.

Theoretical Approaches

Social Cognitive Theory

Psychologist Albert Bandura has defined self-efficacy as one’s belief in one’s ability to succeed in specific situations. One’s sense of self-efficacy can play a major role in how one approaches goals, tasks, and challenges. The concept of self-efficacy lies at the center of Bandura’s social cognitive theory, which emphasizes the role of observational learning and social experience in the development of personality. The main concept in social cognitive theory is that an individual’s actions and reaction in almost every situation is influenced by the actions which that individual has observed in others. People observe others acting within an environment whether natural or social. These observations are remembered by an individual and help shape social behaviors and cognitive processes. This theoretical
approach proposes the idea that by changing how an individual learns their behaviors in the early stages of mental development could have a large impact on their mental processes in later stages of development. Since Self-efficacy is developed from external experiences and self-perception and is influential in determining the outcome of many events, it is an important aspect of social cognitive theory. Self-efficacy represents the personal perception of external social factors. According to Bandura’s theory, people with high self-efficacy—that is, those who believe they can perform well—are more likely to view difficult tasks as something to be mastered rather than something to be avoided.

Social Learning Theory

This psychological theory describes the acquisition of socially valuable skills that are developed exclusively or primarily in a social group. Social learning depends on group dynamics and how individuals either succeed or fail at dynamic interactions. Social learning promotes the development of individual emotional and practical skills as well as the perception of oneself and the acceptance of others with their individual competencies and limitations. It considers that people learn from one another, including such concepts as observational learning, imitation, and modeling. Self-efficacy levels reflect a persons' understanding of what skills they can offer in a group setting.

Self-Concept Theory

Seeks to explain how people interpret and perceive their own existence from cues they receive from external sources. Unlike Social learning and Social Cognitive Theory, self-concept theory focuses on how these perceptions are organized and how they are dynamically active throughout life. Many of the successes and failures that people experience in many areas of life are closely related to the ways that they have learned to view themselves and their relationships with others. It is also becoming clear that self-concept has at least three major qualities of interest to behavioral therapist: (1) it is learned, (2) it is organized, and (3) it is dynamic. Self-concept is learned and, from what we can tell, no one is born with a self-concept. Self-concept organization refers to the way we apply experiences to our selves; we often develop ideas based on multiple experiences. Self-concept dynamics refers to the idea that our perception changes at all times and is not fixed at a certain age.

Attribution Theory

Attribution theory focuses on how people attribute the cause of an event and how those beliefs interact with internal perception of themselves. Attribution Theory defines three major elements of cause: Locus, Stability, and Control ability.

1. Locus - determining the location of the cause—internal (dispositional) or external (situational) to the person • Influential to feelings of self-esteem and self-efficacy • If success or failure is attributed to internal factors, success will lead to pride and increased self-efficacy, whereas failure will diminish self-esteem and negatively affect self-efficacy.
2. **Stability** - whether the cause is static or dynamic over time • Closely related to expectations and goals in the future • If students attribute their failure to stable factors such as the difficulty of the subject, they will expect to fail in that subject in the future

3. **Controllability** - whether the person is actively in control of the cause • Related to emotions such as anger, pity, gratitude, or shame • Conflict can arise if we feel we have not done our best; guilt • If we attribute our own abilities to success we will increase self-efficacy • Failing at a task we cannot control can lead to shame or anger.

**How self-efficacy affects human function**

**Choices regarding behavior**

People will be more inclined to take on a task if they believe they can succeed. People generally avoid tasks where their self-efficacy is low, but will engage in tasks where their self-efficacy is high. People with a self-efficacy significantly beyond their actual ability often overestimate their ability to complete tasks, which can lead to difficulties. On the other hand, people with a self-efficacy significantly lower than their ability are unlikely to grow and expand their skills. Research shows that the ‘optimum’ level of self-efficacy is a little above ability, which encourages people to tackle challenging tasks and gain valuable experience.

**Motivation**

People with high self-efficacy in a task are more likely to make more of an effort, and persist longer, than those with low efficacy. The stronger the self-efficacy or mastery expectations, the more active the efforts. On the other hand, low self-efficacy provides an incentive to learn more about the subject. As a result, someone with a high self-efficacy may not prepare sufficiently for a task.

**Thought patterns & responses**

Low self-efficacy can lead people to believe tasks are harder than they actually are. This often results in poor task planning, as well as increased stress. Observational evidence shows that people become erratic and unpredictable when engaging in a task in which they have low self-efficacy. On the other hand, people with high self-efficacy often take a wider overview of a task in order to take the best route of action. People with high self-efficacy are shown to be encouraged by obstacles to make a greater effort. Self-efficacy also affects how people respond to failure. A person with a high self-efficacy will attribute the failure to external factors, where a person with low self-efficacy will attribute failure to low ability. For example; a person with high self-efficacy in regards to mathematics may attribute a poor result to a harder than usual test, feeling sick, lack of effort or insufficient preparation. A person with a low self-efficacy will attribute the result to poor ability in mathematics.
Health Behaviors

Health behaviors such as non-smoking, physical exercise, dieting, condom use, dental hygiene, seat belt use, or breast self-examination are, among others, dependent on one’s level of perceived self-efficacy (Conner & Norman, 2005). Self-efficacy beliefs are cognitions that determine whether health behavior change will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and failures. Self-efficacy influences the effort one puts forth to change risk behavior and the persistence to continue striving despite barriers and setbacks that may undermine motivation. Self-efficacy is directly related to health behavior, but it also affects health behaviors indirectly through its impact on goals. Self-efficacy influences the challenges that people take on as well as how high they set their goals (e.g., "I intend to reduce my smoking," or "I intend to quit smoking altogether"). A number of studies on the adoption of health practices have measured self-efficacy to assess its potential influences in initiating behavior change (Luszczynska, & Schwarzer, 2005). Often single-item measures or very brief scales (e.g., 4 items) have been used. It is actually not necessary to use larger scales if a specific behavior is to be predicted. More important is rigorous theory-based item wording. A rule of thumb is to use the following semantic structure: "I am certain that I can do xx, even if yy (barrier)" (Schwarzer, 2008). If the target behavior is less specific, one can either use more items that jointly cover the area of interest, or develop a few specific sub-scales. Whereas general self-efficacy measures refer to the ability to deal with a variety of stressful situations, measures of self-efficacy for health behaviors refer to beliefs about the ability to perform certain health behaviors. These behaviors may be defined broadly (i.e., healthy food consumption) or in a narrow way (i.e., consumption of high-fibre food).

Academic Productivity

Research done by Sharon Andrew and Wilma Vialle also show the connection between personalized self-efficacy and productivity. They studied the academic achievements of students involved in science classes in Australia and found that students with high levels of self-efficacy show a boost in academic performance compared to those who reported low self-efficacy. The researchers found that confident individuals typically took control over their own learning experience and were more likely to participate in class and preferred hands-on learning experiences. Those individuals reporting low self-efficacy typically shied away from academic interactions and isolated themselves in their studies.

The Destiny Idea

Bandura showed that people of differing self-efficacy perceive the world in fundamentally different ways. People with a high self-efficacy are generally of the opinion that they are in control of their own lives, that their own actions and decisions shape their lives. On the other hand, people with low self-efficacy may see their lives as somewhat out of their hands.
Factors affecting self-efficacy

Bandura points to four sources affecting self-efficacy;

1. Experience - a.k.a. Enactive Attainment

"Mastery experience" is the most important factor deciding a person's self-efficacy. Simply put, success raises self-efficacy, failure lowers it.

"Children cannot be fooled by empty praise and condescending encouragement. They may have to accept artificial bolstering of their self-esteem in lieu of something better, but what I call their accruing ego identity gains real strength only from wholehearted and consistent recognition of real accomplishment, that is, achievement that has meaning in their culture." (Erik Erikson)

2. Modeling - a.k.a. "Vicarious Experience"

"If they can do it, I can do it as well." This is a process of comparison between oneself and someone else. When people see someone succeeding at something, their self-efficacy will increase; and where they see people failing, their self-efficacy will decrease. This process is more effectual when a person sees him- or herself as similar to his or her own model. If a peer who is perceived as having similar ability succeeds, this will usually increase an observer's self-efficacy. Although not as influential as experience, modeling is a powerful influence when a person is particularly unsure of him- or herself.

3. Social Persuasions

Social persuasions relate to encouragements/discouragements. These can have a strong influence – most people remember times where something said to them significantly altered their confidence. While positive persuasions increase self-efficacy, negative persuasions decrease it. It is generally easier to decrease someone's self-efficacy than it is to increase it.

4. Physiological Factors

In unusual, stressful situations, people commonly exhibit signs of distress; shakes, aches and pains, fatigue, fear, nausea, etc. A person's perceptions of these responses can markedly alter a person's self-efficacy. If a person gets 'butterflies in the stomach' before public speaking, those with low self-efficacy may take this as a sign of their own inability, thus decreasing their self-efficacy further, while those with high self-efficacy are likely to interpret such physiological signs as normal and unrelated to his or her actual ability. Thus, it is the person's belief in the implications of their physiological response that alters their self-efficacy, rather than the sheer power of the response.
Theoretical Models of Behavior

A theoretical model of the effect of self-efficacy on transgressive behavior was developed and verified in research with school children.

Prosociality and moral disengagement

Examples of prosocial behavior are helping others, sharing, being kind and cooperative. Feelings of self-efficacy (with respect to academic work, social interactions, and self-regulation) influence prosocial behavior. Self-regulatory self-efficacy and academic self-efficacy have a negative correlation with moral disengagement (making excuses for bad behavior, avoiding responsibility for consequences, blaming the victim). Social Self-Efficacy has a positive correlation with prosocial behavior. On the other hand, moral disengagement and prosocial behavior have a negative relationship. The three types of self-efficacy are positively correlated.

Over-Efficaciousness in Learning

Research on learning has indicated that in certain circumstances, having less self-efficacy for a subject may be helpful, as negative attitudes towards how quickly/well one will learn can actually prove of benefit. One study used the foreign language classroom to examine students' beliefs about learning, perceptions of goal attainment, and motivation to continue language study. Survey and interview results indicated students' attributions for success and failure and their expectations for certain subjects' learning ability played a role in the relationship between goal attainment and volition. It appears that over-efficaciousness negatively affected student motivation. For other students who felt they were "bad at languages," their negative beliefs increased their motivation to study.

Health Behavior Change

Social-cognitive models of health behavior change include the construct of perceived self-efficacy either as predictors, mediators, or moderators. Self-efficacy is supposed to facilitate the forming of behavioral intentions, the development of action plans, and the initiation of action. Moreover, self-efficacy can assist relapse prevention. As a moderator, self-efficacy can support the translation of intentions into action. See Health Action Process Approach.

Possible Applications

The applications of self-efficacy in modern society are enormous. We are searching for ways to make our children learn more effectively and be more productive, but we are also learning that adults are affected by perceived self-efficacy as well. By understanding how to help influence one to develop a positive mental assessment of their abilities, it is possible for us to design learning and work environments that provide the necessary feedback and support for individuals. This will allow more people to develop high levels of self-efficacy that will translate into increased productivity in their environments. Also, the stress of life
can be at times intolerable, but those with high self-efficacy seem to be more able to live stress-free lives that are rewarding and happy.

**Generalizations/specializations of the Concept**

General Self-Efficacy. Self-efficacy is commonly understood as domain-specific; that is, one can have more or less firm self-beliefs in different domains or particular situations of functioning. But some researchers have also conceptualized a general sense of self-efficacy. It refers to the global confidence in one’s coping ability across a wide range of demanding or novel situations. This broader construct is most frequently assessed with the General Self-Efficacy Scale.

Social Self-efficacy. Social self-efficacy is “an individual’s confidence in her/his ability to engage in the social interactional tasks necessary to initiate and maintain interpersonal relationships.” As a construct social self-efficacy has been variably defined, described, and measured in the scientific literature as researchers began to generalize Bandura’s theory for specific applications. For example, Smith and Betz measured social self-efficacy using an instrument they developed and tested called the Scale of Perceived Social Self-Efficacy (PSSE), which they described as a measure of self-efficacy expectations with respect to a range of social behaviors. They argued that extant attempts to measure the construct (e.g., Scherer et al., 1982; Fitchen et al., 1997) were either “psychometrically inadequate or somewhat narrow in definition and scope”, particularly when applied to various target populations, and thus they created the PSSE scale. Their instrument measured six domains: (1) making friends, (2) pursuing romantic relationships, (3) social assertiveness, (4) performance in public situations, (5) groups or parties, and (6) giving or receiving help. Additionally, Matsushima and Shiomi modified an instrument used in a different study in such a way that they felt it captured and measured the construct of social self-efficacy. Some of the item domains for this instrument included Self-confidence about Social Skill in Personal Relationship, Trust in Friends, and Trust by Friends. Both sets of authors suggest that social self-efficacy is strongly correlated to the constructs of shyness and social anxiety, the measure of self-efficacy having a heavy impact upon that of the others. Moreover, when people lack social support they may be able to compensate for it by self-efficacy or vice versa.

Academic Self-efficacy. Academic self-efficacy refers to a student’s belief that he or she can successfully engage in and complete course-specific academic tasks, such as accomplishing course outcomes, demonstrating competency skills used in the course, satisfactorily completing assignments, passing the course, and meeting the requirements to continue on in his or her major. Various empirical inquiries have also been conducted attempting to measure academic self-efficacy.

Teacher Self-Efficacy. Teacher self-efficacy pertains to one’s perceived competence to deal with all demands and challenges that are implied in teachers’ professional life.

**Controversy**
While the general concept that self-efficacy is a positive aspect of the human cognition is mostly accepted, the advantages of high versus low levels in certain social situations is not universally agreed upon as salient. Some research shows that while self-efficacy can be accurately reported by an individual, it isn’t able to predict actual social interactions in many situations. Tasks that are specifically socially oriented, such as public speaking, were more difficult to individuals with low self-efficacy, but those individuals showed no correlating social responses in a casual social setting. The controversy exists regarding how important self-efficacy is to complex social situations, and currently more research is needed to determine if one can make any predictive claims based on perceived self-efficacy.

**Locus of control**

Locus of control in social psychology refers to the extent to which individuals believe that they can control events that affect them. Understanding of the concept was developed by Julian B. Rotter in 1954, and has since become an important aspect of personality studies.

Individuals with a high internal locus of control believe that events result primarily from their own behavior and actions. Those with a high external locus of control believe that powerful others, fate, or chance primarily determine events.

Those with a high internal locus of control have better control of their behavior, tend to exhibit more political behaviors, and are more likely to attempt to influence other people than those with a high external (or low internal respectively) locus of control. Those with a high internal locus of control are more likely to assume that their efforts will be successful. They are more active in seeking information and knowledge concerning their situation.

One’s "locus" (Latin for "place" or "location") can either be internal (meaning the person believes that they control their life) or external (meaning they believe that their environment, some higher power, or other people control their decisions and their life).

**History of concept**

Locus of control is the framework of Rotter's (1954) social learning theory of personality. Lefcourt (1976) defined perceived locus of control as follows: "Perceived control is defined as a generalised expectancy for internal as opposed to external control of reinforcements" (Lefcourt 1976, p. 27). Early work on the topic of expectancies about control of reinforcement had, as Lefcourt explains, been performed in the 1950s by James and Phares prepared for unpublished doctoral dissertations supervised by Rotter at The Ohio State University. Attempts have been made to trace the genesis of the concept to the work of Alfred Adler, but its immediate background lies in the work of Rotter students, such as William H. James (not to be confused with William James), who studied two types of expectancy shifts:

- typical expectancy shifts, believing that a success or failure would be followed by a similar outcome; and
- atypical expectancy shifts, believing that a success or failure would be followed by a
dissimilar outcome.

Work in this field led psychologists to suppose that people who were more likely to display
typical expectancy shifts were those who more likely to attribute their outcomes to ability,
whereas those who displayed atypical expectancy would be more likely to attribute their
outcomes to chance. This was interpreted as saying that people could be divided into those
who attribute to ability (an internal cause) versus those who attribute to luck (an external
cause). However, after 1970, Bernard Weiner pointed out that attributions to ability versus
luck also differ in that the former are an attribution to a stable cause, the latter an
attribution to an unstable cause.

A revolutionary paper in this field was published in 1966, in the journal Psychological
Monographs, by Rotter. In it, Rotter summarized over ten years of research by himself and
his students, much of it previously unpublished. Early history of the concept can be found
in Lefcourt (1976), who, early in his treatise on the topic, relates the concept to learned
helplessness. Rotter (1975, 1989) has discussed problems and misconceptions in others'
use of the internal versus external control of reinforcement construct...

**Locus of control personality orientations**

Rotter (1975) cautioned that internality and externality represent two ends of a
continuum, not an either/or typology. Internals tend to attribute outcomes of events to
their own control. Externals attribute outcomes of events to external circumstances. For
example, college students with a strong internal locus of control may believe that their
grades were achieved through their own abilities and efforts, whereas those with a strong
external locus of control may believe that their grades are the result of good or bad luck, or
to a professor who designs bad tests or grades capriciously; hence, they are less likely to
expect that their own efforts will result in success and are therefore less likely to work hard
for high grades. (It should not be thought however, that internality is linked exclusively
with attribution to effort and externality with attribution to luck, as Weiner's work (see
below) makes clear). This has obvious implications for differences between internals and
externals in terms of their achievement motivation, suggesting that internal locus is linked
with higher levels of N-ach. Due to their locating control outside themselves, externals tend
to feel they have less control over their fate. People with an external locus of control tend to
be more stressed and prone to clinical depression (Benassi, Sweeney & Dufour, 1988; cited
in Maltby, Day & Macaskill, 2007).

Internals were believed by Rotter (1966) to exhibit two essential characteristics: high
achievement motivation and low outer-directedness. This was the basis of the locus of
control scale proposed by Rotter in 1966; although this was actually based on Rotter's
belief that locus of control is a unidimensional construct. Since 1970, Rotter's assumption
of unidimensionality has been challenged, with Levenson, for example, arguing that
different dimensions of locus of control, such as belief that events in one's life are self-
determined, are organized by powerful others and are chance-based, must be separated.
Weiner's early work in the 1970s, suggested that, more-or-less orthogonal to the
internality-externality dimension, we should also consider differences between those who attribute to stable causes, and those who attribute to unstable causes.

This meant that attributions could be to ability (an internal stable cause), effort (an internal unstable cause), task difficulty (an external stable cause) or luck (an external, unstable cause). Such at least were how the early Weiner saw these four causes, although he has been challenged as to whether people do see luck, for example, as an external cause, whether ability is always perceived as stable and whether effort is always seen as changing. Indeed, in more recent publications (e.g. Weiner, 1980) Weiner uses different terms for these four causes—such as "objective task characteristics" in place of task difficulty and "chance" in place of luck. It has also been notable how psychologists since Weiner have distinguished between stable effort and unstable effort—knowing that, in some circumstances, effort could be seen as a stable cause, especially given the presence of certain words such as "industrious" in the English language.

Scales to measure locus of control

The most famous questionnaire to measure locus of control is the 23-item forced choice items and six filler items scale of Rotter (1966), but this is not the only questionnaire—indeed, predating Rotter’s work by five years is Bialer’s (1961) 23-item scale for children. Also of relevance to locus of control scale are the Crandall Intellectual Ascription of Responsibility Scale (Crandall, 1965), and the Nowicki-Strickland Scale. One of the earliest psychometric scales to assess locus of control, using a Likert-type scale in contrast to the forced-choice alternative measure in Rotter’s scale, was that devised by W.H. James, for his unpublished doctoral dissertation, supervised by Rotter at Ohio State University, although this remained an unpublished scale.

Many measures of locus of control have appeared since Rotter’s scale, some that use a five-point scale, such as The Duttweller Control Index (Duttweller, 1984), and some that relate to specific areas, such as health. These scales are reviewed by Furnham and Steele (1993), and include those related to health psychology, industrial and organizational psychology, and those specifically for children, such as the Stanford Preschool Internal-External Control Index, which is used for three- to six-year-olds. Furnham and Steele (1993) cite data that suggest that the most reliable and valid of the questionnaires for adults is the Duttweller scale. For a review of the health questionnaires cited by these authors, see below under "Applications".

The Internal Control Index of Duttweller

A scale with reasonably good psychometric properties has been the Internal Control Index (ICI) of Duttweller (1984). In her paper on this scale, Duttweller notes many problems with Rotter’s I-E Scale, including problems with its forced choice format, its susceptibility to social desirability and her observation that studies that subject the scale to factor analysis suggest it is not assessing an entirely homogeneous concept. She also notes that, while other scales existed in 1984 to measure locus of control, "they appear to be subject to many of the same problems" (Duttweller, 1984, p. 211). She developed the ICI to assess several
variables especially pertinent to internal locus: cognitive processing, autonomy, resistance to social influence, self-confidence and delay of gratification. After administration of this scale to 133 students at Gainesville Junior College in Georgia, United States, she found the scale to have good internal reliability, with a Cronbach’s alpha of 0.85. Unlike the forced-choice format used on Rotter’s scale, Duttweiler’s 28-item ICI uses a Likert-type scale, in which people have to state whether they would rarely, occasionally, sometimes, frequently or usually behave as specified by each of 28 statements.

Related area: attributional style

Attributional style, or explanatory style, is a concept that was introduced by Lyn Yvonne Abramson, Martin Seligman and John D. Teasdale (Abramson, Seligman & Teasdale, 1978). Buchanan and Seligman (1995) have edited a book-length review of the topic. This concept goes a stage further than Weiner, stating that, in addition to the concepts of internality-externality and stability, a dimension of globality-specificity is also needed. Abramson et al. therefore believed that how people explained successes and failures in their lives related to whether they attributed these to internal or external factors, to factors that were short-term or long-term and to factors that affected all situations in their situations.

The topic of attribution theory, introduced to psychology by Fritz Heider, has had an influence on locus of control theory, but it is important to appreciate the differences between the history of these two models in psychology. Attribution theorists have been, largely speaking, social psychologists, concerned with the general processes characterizing how and why people in general make the attributions they do, whereas locus of control theorists have been more concerned with individual differences.

Significant to the history of both approaches were the contributions made by Bernard Weiner, in the 1970s. Prior to this time, attribution theorists and locus of control theorists had been largely concerned with divisions into external and internal loci of causality. Weiner added the dimension of stability-instability, and somewhat later, controllability, indicating how a cause could be perceived as having been internal to a person yet still beyond the person’s control. The stability dimension added to the understanding of why people succeed or fail after such outcomes. Although not part of Weiner’s model, a further dimension of attribution was added by Abramson, Seligman and Teasdale, that of globality-specificity (see the article on explanatory style).

Applications of locus of control theory

Locus of control’s most famous application has probably been in the area of health psychology, largely thanks to the work of Kenneth Wallston. Scales to measure locus of control in the health domain are reviewed by Furnham and Steele (1993). The most famous of these would be the Health Locus of Control Scale and the Multidimensional Health Locus of Control Scale, or MHLC (Wallston, Wallston, & DeVellis, 1976; Wallston, Wallston, Kaplan & Maises, 1976). The latter scale is based on the idea, echoing Levenson’s earlier work, that health may be attributed to three possible outcomes: internal factors, such as self-determination of a healthy lifestyle, powerful others, such as one’s doctor, or luck.
Some of the scales reviewed by Furnham and Steele (1993) relate to health in more specific domains, such as obesity (for example, Saltzer’s (1982) Weight Locus of Control Scale or Stotland and Zuroff’s (1990) Dieting Beliefs Scale), or mental health (such as Wood and Letak’s (1982) Mental Health Locus of Control Scale or the Depression Locus of Control Scale of Whiteman, Desmond and Price, 1987) and cancer (the Cancer Locus of Control Scale of Pruyn et al., 1988). In discussing applications of the concept to health psychology, Furnham and Steele also refer to Claire Bradley's work, linking locus of control to management of diabetes mellitus. Empirical data on health locus of control in various fields has been reviewed by Norman and Bennett (1995). These authors note that data on whether certain health-related behaviors are related to internal health locus of control have been ambiguous. For example, they note that some studies found that internal health locus of control is linked with increased exercise, but they also cite several studies that have found only a weak or no relationship between exercise behaviors (such as jogging) and internal health locus of control. They note similar ambiguity for data on the relationship between internal health locus of control and other health-related behaviors, such as breast self-examination, weight control and preventative health behaviors. Of particular interest are the data these authors cite on the relationship between internal health locus of control and alcohol consumption.

Norman and Bennett note that some studies that compared alcoholics with non-alcoholics suggest alcoholism is linked to increased externality for health locus of control, but other studies have found alcoholism to be linked with increased internality, and similar ambiguity has been found in studies that looked at alcohol consumption in a more general, non-alcoholic population. Norman and Bennett appear a little more optimistic in reviewing the literature on the relationship between internal health locus of control and smoking cessation, although they also point out that there are grounds for supposing that powerful others health locus of control, as well as internal health locus of control, may be linked with smoking cessation.

Norman and Bennett argue that a stronger relationship is found when health locus of control is assessed for specific domains than when general measures of locus of control are taken. Overall, studies using behavior-specific health locus scales have tended to produce more positive results (Lefcourt, 1991). Moreover, these scales have been found to be more predictive of general behavior than more general scales, such as the MHLC scale (Norman & Bennett, 1995, p. 72). Norman and Bennett cite several studies that used health-related locus of control scales in specific domains, including smoking cessation (Georgio & Bradley, 1992), diabetes (Ferraro, Price, Desmond & Roberts, 1987), tablet-treated diabetes (Bradley, Lewis, Jennings & Ward, 1990), hypertension (Stanton, 1987), arthritis (Nicasio et al., 1985), cancer (Pruyn et al., 1988) and heart and lung disease (Allison, 1987).

They also argue that health locus of control is better at predicting health-related behavior if studied in conjunction with health value, i.e. the value people attach to their health, suggesting that health value is an important moderator variable in the health locus of control relationship. For example, Weiss and Larsen (1990) (cited in Norman & Bennett, 1995) found increased relationship between internal health locus of control and health
when health value was assessed. Despite the importance that Norman and Bennet (1995) attach to use of specific measures of locus of control, there are still some general textbooks on personality, such as Maltby, Day and Macaskill (2007), which continue to cite studies linking internal locus of control with improved physical health, mental health and quality of life in people undergoing conditions as diverse as HIV, migraines, diabetes, kidney disease and epilepsy (Maltby, Day & Macaskill, 2007).

In the 1970s and 1980s, Whyte correlated locus of control with academic success of students enrolled in higher education courses. Students who tended to be more internally controlled believed that hard work and focus would result oftentimes in successful academic progress and they performed better academically. Those students who were identified as more externally controlled, believing that their future depended upon luck or fate, tended to have lower academic performance levels. Cassandra B. Whyte further researched how control tendency influenced behavioral outcomes in the academic realm by examining the effects of various modes of counseling on grade improvements and the locus of control of high-risk college students.

Organizational psychology and religion

Other fields to which the concept has been applied include industrial and organizational psychology, sports psychology, educational psychology and the psychology of religion. Richard Kahoe has published celebrated work in the latter field, suggesting that intrinsic religious orientation correlates positively, extrinsic religious orientation correlates negatively, with internal locus. Of relevance to both health psychology and the psychology of religion is the work prepared by Holt, Clark, Kreuter and Rubio (2003), in preparing a questionnaire to assess spiritual health locus of control. These authors distinguished between an active spiritual health locus of control orientation, in which "God empowers the individual to take healthy actions" and a more passive spiritual health locus of control orientation, where people leave everything to God in the care of their own health. In industrial and organizational psychology, it has been found that internals are more likely to take positive action to change their jobs, rather than merely to talk about occupational change, than externals (Allen, Weeks & Moffat, 2005; cited in Maltby et al., 2007).

Familial origins

The development of locus of control is associated with family style and resources, cultural stability and experiences with effort leading to reward. Many internals have grown up with families that modeled typical internal beliefs. These families emphasized effort, education, responsibility and thinking. Parents typically gave their children rewards they had promised them. In contrast, externals are typically associated with lower socioeconomic status. Societies experiencing social unrest increase the expectancy of being out-of-control, so people in such societies become more external.

The research of Schneewind (1995; cited in Schultz & Schultz, 2005) suggests that "children in large single parent families headed by women are more likely to develop an external locus of control" (Schultz & Schultz, 2005, p. 439). Schultz and Schultz also point
out that children who develop an internal locus tend to come from families where parents have been supportive and consistent in self-discipline. There has been some ambiguity about whether parental locus of control influences a child’s locus of control, although at least one study has found that children are more likely to attribute their successes and failures to unknown causes if their parents had an external locus of control (see the first of the external links listed below).

As children grow older, they gain skills that give them more control over their environment. In support of this, psychological research has found that older children have more internal locus of control than younger children. Findings from early studies on the familial origins of locus of control were summarized by Lefcourt:

"Warmth, supportiveness and parental encouragement seem to be essential for development of an internal locus".

**Locus of control and age**

It is sometimes assumed that as people age, they will become less internal and more external, but data here has been ambiguous. Longitudinal data collected by Gatz and Karel (cited in Johnson et al., 2004) imply that internality may increase up to middle age, and thereafter decrease. Noting the ambiguity of data in this area, Aldwin and Gilmer (2004) cite Lachman’s claim that locus of control is ambiguous. Indeed, there is evidence here that changes in locus of control in later life relate more visibly to increased externality, rather than reduced internality, if the two concepts are taken to be orthogonal. Evidence cited by Schultz and Schultz (2005), for example Heckhausen and Schulz (1995) or Ryckman and Malikosi, 1975 (cited in Schultz & Schultz, 2005), suggests that locus of control increases in internality up until middle age. These authors also note that attempts to control the environment become more pronounced between the age of eight and fourteen. For more on the relationship between locus of control and coping with the demands of later life, see the article on aging.

A study published in the journal Psychosomatic Medicine examined the health effect of childhood "locus of control". 7,500 British adults followed from birth who had shown an internal locus of control at the age of 10 were less likely to be overweight at age 30. The children who had an internal locus of control also appeared the have higher levels of self esteem.

**Gender-based differences in locus of control**

As Schultz and Schultz (2005) point out, significant differences in locus of control have not been found for adults in a U.S. population. However, these authors also note that there may be specific sex-based differences for specific categories of item to assess locus of control—for example, they cite evidence that men may have a greater internal locus for questions related to academic achievement (Strickland & Haley, 1980; cited in Schultz & Schultz, 2005).
Cross-cultural issues in locus of control

The question of whether people from different cultures vary in locus of control has long been of interest to social psychologists. Japanese people tend to be more external in locus of control orientation than people in the U.S., whereas differences in locus of control between different countries within Europe, and between the U.S. and Europe, tend to be small (Berry, Poortinga, Segall & Dasen, 1992). As Berry et al. (1992) point out, different ethnic groups within the United States have been compared on locus of control, with blacks in the U.S. being more external than whites, even when socio-economic status is controlled (Dyal, 1984; cited in Berry et al., 1992). Berry et al. (1992) also point out how research on other ethnic minorities in the U.S., such as Hispanics, has been ambiguous. More on cross-cultural variations in locus of control can be found in Shiraev and Levy (2004). The research in this area indicates how locus of control has been a useful concept for researchers in cross-cultural psychology.

Self-efficacy

Self-efficacy is another related concept, introduced by Albert Bandura. Although someone may believe that how some future event turns out is under their control, they may or may not believe that they are capable of behaving in a way that will produce the desired result. For example, an athlete may believe that training eight hours a day would result in a marked improvement in ability (an internal locus of control orientation) but not believe that he or she is capable of training that hard (a low sense of self-efficacy). Self-efficacy has been measured by means of a psychometric scale and differs from locus of control in that whereas locus of control is generally a measure of cross-situational beliefs about control, self-efficacy is used as a concept to relate to more circumscribed situations and activities. Bandura has emphasized how the concept differs from self-esteem—using the example that a person may have low self-efficacy for ballroom dancing, but that if ballroom dancing is not very important to that person, this is unlikely to result in low self-esteem.

Psychiatrist and expert on trauma and dissociation, Colin A. Ross, MD, describes the inappropriate self-blame that characterizes many adult survivors of childhood trauma as "the locus of control shift." This theory is pivotal in his therapeutic sessions with near-psychotic people at the Ross Institute for Psychological Trauma.

It is important to appreciate that differences do exist between internal locus of control and self-efficacy. Smith (1989) has argued that the Rotter scale to assess locus of control cannot be taken as a measure of self-efficacy, because "only a subset of items refer directly to the subject's capabilities" (Smith, p. 229). Smith noted, in his empirical study, that coping skills training led to increases in self-efficacy, but did not affect locus of control as measured by Rotter's (1966) scale.

Summary, critique and the future

Locus of control has generated much research in a variety of areas in psychology. The construct is applicable to fields such as educational psychology, health psychology or
clinical psychology. There will probably continue to be debate about whether specific or more global measures of locus of control will prove to be more useful. Careful distinctions should also be made between locus of control (a concept linked with expectancies about the future) and attributional style (a concept linked with explanations for past outcomes), or between locus of control and concepts such as self-efficacy. The importance of locus of control as a topic in psychology is likely to remain quite central for many years.

Explanatory style

Explanatory style is a psychological attribute that indicates how people explain to themselves why they experience a particular event, either positive or negative. Psychologists have identified three components in explanatory style:

- Personal. This involves how one explains where the cause of an event arises. People experiencing events may see themselves as the cause; that is, they have internalised the cause for the event. Example: "I always forget to make that turn" (internal) as opposed to "That turn can sure sneak up on you" (external).
- Permanent. This involves how one explains the extent of the cause. People may see the situation as unchangeable, e.g., "I always lose my keys" or "I never forget a face".
- Pervasive. This involves how one explains the extent of the effects. People may see the situation as affecting all aspects of life, e.g., "I can't do anything right" or "Everything I touch seems to turn to gold".

People who generally tend to blame themselves for negative events, believe that such events will continue indefinitely, and let such events affect many aspects of their lives display what is called a pessimistic explanatory style. Conversely, people who generally tend to blame others for negative events, believe that such events will end soon, and do not let such events affect too many aspects of their lives display what is called an optimistic explanatory style.

Some research has linked a pessimistic explanatory style to depression and physical illness. The concept of explanatory style encompasses a wide range of possible responses to both positive and negative occurrences, rather than a black-white difference between optimism and pessimism. Also, an individual does not necessarily show a uniform explanatory style in all aspects of life, but may exhibit varying responses to different types of events.

Attributional style effects

This concept has had much relevance to the study of depression, with Abramson et al. believing that those who showed a characteristic way of attributing negative outcomes – to internal, stable and global causes – would be likely to suffer depression when negative events happened to them. It is important to remember this: since their model is a diathesis-stress model, they were not arguing that this attributional style alone caused depression, nor were they arguing that this attributional style simply increases vulnerability to depression – the model stipulates that an objective, negative event must
occur in conjunction with this style for clinical depression to result. Empirical research has been performed in support of this theory, as the meta-analysis of 104 empirical studies of the theory reveals. Data have, however, been ambiguous, and some researchers believe that the theory is well-supported, some believe that it has not had impressive empirical support and some believe that, at least in the early days of the theory, the theory was never adequately tested. An important consideration here, emphasised by Robbins and Hayes, is that the Abramson-Seligman-Teasdale model of depression is a diathesis-stress model, implying that it is important to control for severity of actual negative event in comparisons of attributional styles of depressive and non-depressives. Indeed, one of the factors accounting for ambiguity in research into the model is whether empirical researchers have assessed attributions for hypothetical events or for real events. Interestingly, those studies that have looked at attributions for hypothetical events have been more supportive of the model, possibly because these studies are more likely to have controlled for event severity.

Attributional style has been assessed on questionnaires such as the Attributional Style Questionnaire or A.S.Q., which assesses attributions for six negative and six positive hypothetical events, the Expanded Attributional Style Questionnaire or E.A.S.Q., which assesses attributions for eighteen hypothetical negative events, and various scales that assess attributions for real events, such as the Real Events Attributional Style Questionnaire or the Attributions Questionnaire. Although these scales provide empirical methodology for study of attributional style, and considerable empirical data support the Abramson-Seligman-Teasdale model of depression, there has been dispute about whether this concept really exists. Cutrona, Russell and Jones, for example, found evidence for considerable cross-situational variation and temporal change of attributional style in women suffering from post-partum depression. Xenikou notes, however, that Cutrona, Russell and Jones found more evidence for the cross-situational consistency of stability and globalism than of internalization. More data in support of long-term stability of attributional style has come from a diary study by Burns and Seligman. Using a technique called Content Analysis of Verbatim Explanation (CAVE), these authors found that over a long time period, people did show stable patterns of how they manifested attributional style.

The question of how specific the domain for which attributional style is being measured has to be addressed at this stage. Using the Attributional Style Assessment Test of Anderson, Anderson and his colleagues found some evidence for an attributional style for specific domains, such as work-related domains or interpersonal domains. Their position therefore fell midway between the enthusiasm of keen believers in attributional style, and the pessimism of those skeptical of the concept.

More recently than the "learned helplessness" model which formed the theoretical basis of the original Abramson, Seligman and Teasdale statement on attributional style, Abramson, Metalsky and Alloy proposed the hopelessness theory. This theory distinguishes between hopeless depression and circumscribed pessimism. It emphasizes the dimensions of stability and globality rather than internality, holding that attributions of one’s failures to stable and global causes, rather than to internal causes, is associated with hopelessness depression. Hopelessness theory also emphasizes how perceived importance of a negative
outcome, and perceived consequences of a negative outcome, are important as well as causal attributions in relation to clinical depression.

The important differences between attributional style and locus of control are that the latter is concerned with expectancies about the future, the former with attributions for the past, and that whereas locus of control cuts across both positive and negative outcomes, authors in the attributional style field have distinguished between a Pessimistic Explanatory Style, in which failures are attributed to internal, stable and global factors, successes to external, unstable and specific causes; and an Optimistic Explanatory Style, in which successes are attributed to internal, stable and global factors, failures to external, unstable and specific causes.

Explanations as to how individual differences in attributional style originate have been considered by Eisner. She notes that repeated exposure to controllable events may foster an optimistic explanatory style, whereas repeated exposure to uncontrollable events may foster a negative one, and also cites evidence from twin studies for some heredity basis to attributional style. Original with Eisner is the argument that trust in interpersonal relationships is linked with optimistic explanatory style.

**Reciprocal determinism**

Reciprocal determinism is the theory set forth by psychologist Albert Bandura that a person's behavior both influences and is influenced by personal factors and the social environment. Bandura accepts the possibility of an individual's behavior being conditioned through the use of consequences. At the same time he asserts that a person's behavior (and personal factors, such as cognitive skills or attitudes) can impact the environment. These skill sets result in an under- or over-compensated ego that, for all creative purposes are too strong or too weak to focus on pure outcome.

An example of Bandura's reciprocal determinism is when a child is acting out in school. The child doesn't like going to school; therefore, he/she acts out in class. This results in teachers and administrators of the school disliking having the child around. When confronted by the situation, the child admits he/she hates school and other peers don't like him/her. This results in the child acting inappropriately, forcing the administrators who dislike having him/her around to create a more restrictive environment for children of this stature. Each behavioral and environmental factor coincides with the child and so forth resulting in a continuous battle on all three levels.

The basis of reciprocal determinism should transform individual behavior by allowing subjective thought processes transparency when contrasted with cognitive, environmental, and external social stimulus events.

Reciprocal determinism is the idea that behavior is controlled or determined by the individual, through cognitive processes, and by the environment, through external social stimulus events.
Triadic reciprocal causation

Triadic reciprocal causation is a term introduced by Albert Bandura to refer to the mutual influence between three sets of factors:

- personal factors (e.g., cognitive, affective and biological events),
- the environment, and
- behavior

The interaction of genes and environment

Behavioral genetics is a relatively new field of study attempting to make sense of both genetic and environmental contributions to individual variations in human behavior. Genes can be turned on and off. Multiple genes are factors in forming behavior traits.

The interaction of genes and environment: aggression in abused boys

Researchers believe there is a genetic link to impulsive aggression through the impact of a gene on the production of an enzyme called Monoamine oxidase A (MAOA). The MAOA gene reduces the production of MAOA, leading to increased incidents of impulsive aggression. A 26-year-study in New Zealand found strong correlation between experience of childhood abuse and criminal or violent behavior in males with the MAOA gene. In that study, impulsive aggression was found to be nine times more likely to manifest in males with the gene who were abused than in abused males without the gene or males with the gene who had not been abused.

ALBERT BANDURA: Summarized

1925 - present

Dr. C. George Boeree

Biography

Albert Bandura was born December 4, 1925, in the small town of Mundare in northern Alberta, Canada. He was educated in a small elementary school and high school in one, with minimal resources, yet a remarkable success rate. After high school, he worked for one summer filling holes on the Alaska Highway in the Yukon.
He received his bachelors degree in Psychology from the University of British Columbia in 1949. He went on to the University of Iowa, where he received his Ph.D. in 1952. It was there that he came under the influence of the behaviorist tradition and learning theory.

While at Iowa, he met Virginia Varns, an instructor in the nursing school. They married and later had two daughters. After graduating, he took a postdoctoral position at the Wichita Guidance Center in Wichita, Kansas.

In 1953, he started teaching at Stanford University. While there, he collaborated with his first graduate student, Richard Walters, resulting in their first book, *Adolescent Aggression*, in 1959.

Bandura was president of the APA in 1973, and received the APA's Award for Distinguished Scientific Contributions in 1980. He continues to work at Stanford to this day.

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**Theory**

Behaviorism, with its emphasis on experimental methods, focuses on variables we can observe, measure, and manipulate, and avoids whatever is subjective, internal, and unavailable -- i.e. mental. In the experimental method, the standard procedure is to manipulate one variable, and then measure its effects on another. All this boils down to a theory of personality that says that one’s environment causes one’s behavior.

Bandura found this a bit too simplistic for the phenomena he was observing -- aggression in adolescents -- and so decided to add a little something to the formula: He suggested that environment causes behavior, true; but behavior causes environment as well. He labeled this concept **reciprocal determinism**: The world and a person’s behavior cause each other.

Later, he went a step further. He began to look at personality as an interaction among three “things:” the environment, behavior, and the person’s psychological processes. These psychological processes consist of our ability to entertain images in our minds, and language. At the point where he introduces imagery, in particular, he ceases to be a strict behaviorist, and begins to join the ranks of the cognitivists. In fact, he is often considered a “father” of the cognitivist movement!

Adding imagery and language to the mix allows Bandura to theorize much more effectively than someone like, say, B. F. Skinner, about two things that many people would consider the “strong suit” of the human species: observational learning (modeling) and self-regulation.

**Observational learning, or modeling**
Of the hundreds of studies Bandura was responsible for, one group stands out above the others -- the bobo doll studies. He made a film of one of his students, a young woman, essentially beating up a bobo doll. In case you don’t know, a bobo doll is an inflatable, egg-shape balloon creature with a weight in the bottom that makes it bob back up when you knock him down. Nowadays, it might have Darth Vader painted on it, but back then it was simply “Bobo” the clown.

The woman punched the clown, shouting “sockeroo!”. She kicked it, sat on it, hit with a little hammer, and so on, shouting various aggressive phrases. Bandura showed his film to groups of kindergartners who, as you might predict, liked it a lot. They then were let out to play. In the play room, of course, were several observers with pens and clipboards in hand, a brand new bobo doll, and a few little hammers.

And you might predict as well what the observers recorded: A lot of little kids beating the daylights out of the bobo doll. They punched it and shouted “sockeroo,” kicked it, sat on it, hit it with the little hammers, and so on. In other words, they imitated the young lady in the film, and quite precisely at that.

This might seem like a real nothing of an experiment at first, but consider: These children changed their behavior without first being rewarded for approximations to that behavior! And while that may not seem extraordinary to the average parent, teacher, or casual observer of children, it didn’t fit so well with standard behavioristic learning theory. He called the phenomenon observational learning or modeling, and his theory is usually called social learning theory.

Bandura did a large number of variations on the study: The model was rewarded or punished in a variety of ways, the kids were rewarded for their imitations, the model was changed to be less attractive or less prestigious, and so on. Responding to criticism that bobo dolls were supposed to be hit, he even did a film of the young woman beating up a live clown. When the children went into the other room, what should they find there but -- the live clown! They proceeded to punch him, kick him, hit him with little hammers, and so on.

All these variations allowed Bandura to establish that there were certain steps involved in the modeling process:

1. **Attention.** If you are going to learn anything, you have to be paying attention. Likewise, anything that puts a damper on attention is going to decrease learning, including observational learning. If, for example, you are sleepy, groggy, drugged, sick, nervous, or “hyper,” you will learn less well. Likewise, if you are being distracted by competing stimuli.

Some of the things that influence attention involve characteristics of the model. If the model is colorful and dramatic, for example, we pay more attention. If the model is attractive, or prestigious, or appears to be particularly competent, you will pay more attention. And if the model seems more like yourself, you pay more attention. These kinds of variables directed Bandura towards an examination of television and its effects on kids!
2. **Retention.** Second, you must be able to retain -- remember -- what you have paid attention to. This is where imagery and language come in: we store what we have seen the model doing in the form of mental images or verbal descriptions. When so stored, you can later “bring up” the image or description, so that you can reproduce it with your own behavior.

3. **Reproduction.** At this point, you’re just sitting there daydreaming. You have to translate the images or descriptions into actual behavior. So you have to have the ability to reproduce the behavior in the first place. I can watch Olympic ice skaters all day long, yet not be able to reproduce their jumps, because I can’t ice skate at all! On the other hand, if I could skate, my performance would in fact improve if I watch skaters who are better than I am.

Another important tidbit about reproduction is that our ability to imitate improves with practice at the behaviors involved. And one more tidbit: Our abilities improve even when we just imagine ourselves performing! Many athletes, for example, imagine their performance in their mind’s eye prior to actually performing.

4. **Motivation.** And yet, with all this, you’re still not going to do anything unless you are motivated to imitate, i.e. until you have some reason for doing it. Bandura mentions a number of motives:

a. **past reinforcement,** ala traditional behaviorism.
b. **promised reinforcements** (incentives) that we can imagine.
c. **vicarious reinforcement** -- seeing and recalling the model being reinforced.

Notice that these are, traditionally, considered to be the things that “cause” learning. Bandura is saying that they don’t so much cause learning as cause us to demonstrate what we have learned. That is, he sees them as motives.

Of course, the negative motivations are there as well, giving you reasons not to imitate someone:

d. **past punishment.**
e. **promised punishment** (threats).
d. **vicarious punishment.**

Like most traditional behaviorists, Bandura says that punishment in whatever form does not work as well as reinforcement and, in fact, has a tendency to “backfire” on us.

**Self-regulation**

Self-regulation -- controlling our own behavior -- is the other “workhorse” of human personality. Here Bandura suggests three steps:

1. **Self-observation.** We look at ourselves, our behavior, and keep tabs on it.
2. **Judgment.** We compare what we see with a standard. For example, we can compare our performance with traditional standards, such as “rules of etiquette.” Or we can create arbitrary ones, like “I’ll read a book a week.” Or we can compete with others, or with ourselves.

3. **Self-response.** If you did well in comparison with your standard, you give yourself rewarding self-responses. If you did poorly, you give yourself punishing self-responses. These self-responses can range from the obvious (treating yourself to a sundae or working late) to the more covert (feelings of pride or shame).

A very important concept in psychology that can be understood well with self-regulation is **self-concept** (better known as self-esteem). If, over the years, you find yourself meeting your standards and life loaded with self-praise and self-reward, you will have a pleasant self-concept (high self-esteem). If, on the other hand, you find yourself forever failing to meet your standards and punishing yourself, you will have a poor self-concept (low self-esteem).

Recall that behaviorists generally view reinforcement as effective, and punishment as fraught with problems. The same goes for self-punishment. Bandura sees three likely results of excessive self-punishment:

a. **compensation** -- a superiority complex, for example, and delusions of grandeur.
b. **inactivity** -- apathy, boredom, depression.
c. **escape** -- drugs and alcohol, television fantasies, or even the ultimate escape, suicide.

These have some resemblance to the unhealthy personalities Adler and Horney talk about: an aggressive type, a compliant type, and an avoidant type respectively.

Bandura’s recommendations to those who suffer from poor self-concepts come straight from the three steps of self-regulation:

1. **Regarding self-observation** -- know thyself! Make sure you have an accurate picture of your behavior.

2. **Regarding standards** -- make sure your standards aren’t set too high. Don’t set yourself up for failure! Standards that are too low, on the other hand, are meaningless.


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**Therapy**

**Self-control therapy**
The ideas behind self-regulation have been incorporated into a therapy technique called self-control therapy. It has been quite successful with relatively simple problems of habit, such as smoking, overeating, and study habits.

1. **Behavioral charts.** Self-observation requires that you keep close tabs on your behavior, both before you begin changes and after. This can involve something as simple as counting how many cigarettes you smoke in a day to complex behavioral diaries. With the diary approach, you keep track of the details, the when and where of your habit. This lets you get a grip on what kinds of cues are associated with the habit: Do you smoke more after meals, with coffee, with certain friends, in certain locations...?

2. **Environmental planning.** Taking your lead from your behavioral charts and diaries, you can begin to alter your environment. For example, you can remove or avoid some of those cues that lead to your bad behaviors: Put away the ashtrays, drink tea instead of coffee, divorce that smoking partner.... You can find the time and place best suited for the good alternative behaviors: When and where do you find you study best? And so on.

3. **Self-contracts.** Finally, you arrange to reward yourself when you adhere to your plan, and possibly punish yourself when you do not. These contracts should be written down and witnessed (by your therapist, for example), and the details should be spelled out very explicitly: “I will go out to dinner on Saturday night if I smoke fewer cigarettes this week than last week. I will do paperwork instead if I do not.”

You may involve other people and have them control your rewards and punishments, if you aren’t strict enough with yourself. Beware, however. This can be murder on your relationships, as you bite their heads off for trying to do what you told them to do!

**Modeling therapy**

The therapy Bandura is most famous for, however, is modeling therapy. The theory is that, if you can get someone with a psychological disorder to observe someone dealing with the same issues in a more productive fashion, the first person will learn by modeling the second.

Bandura’s original research on this involved herpophobia -- people with a neurotic fear of snakes. The client would be lead to a window looking in on a lab room. In that room is nothing but a chair, a table, a cage on the table with a locked latch, and a snake clearly visible in the cage. The client then watches another person -- an actor -- go through a slow and painful approach to the snake. He acts terrified at first, but shakes himself out of it, tells himself to relax and breathe normally and take one step at a time towards the snake. He may stop in the middle, retreat in panic, and start all over. Ultimately, he gets to the point where he opens the cage, removes the snake, sits down on the chair, and drapes it over his neck, all the while giving himself calming instructions.

After the client has seen all this (no doubt with his mouth hanging open the whole time), he is invited to try it himself. Mind you, he knows that the other person is an actor -- there is
no deception involved here, only modeling! And yet, many clients -- lifelong phobics -- can
go through the entire routine first time around, even after only one viewing of the actor!
This is a powerful therapy.

One drawback to the therapy is that it isn’t easy to get the rooms, the snakes, the actors,
etc., together. So Bandura and his students have tested versions of the therapy using
recordings of actors and even just imagining the process under the therapist’s direction.
These methods work nearly as well.

Discussion

Albert Bandura has had an enormous impact on personality theory and therapy. His
straightforward, behaviorist-like style makes good sense to most people. His action-
oriented, problem-solving approach likewise appeals to those who want to get things done,
rather than philosophize about ids, archetypes, actualization, freedom, and all the many
other mentalistic constructs personologists tend to dwell on.

Among academic psychologists, research is crucial, and behaviorism has been the preferred
approach. Since the late 1960’s, behaviorism has given way to the “cognitive revolution,” of
which Bandura is considered a part. Cognitive psychology retains the experimentally-
oriented flavor of behaviorism, without artificially restraining the researcher to external
behaviors, when the mental life of clients and subjects is so obviously important.

This is a powerful movement, and the contributors include some of the most important
people in psychology today: Julian Rotter, Walter Mischel, Michael Mahoney, and David
Meichenbaum spring to my mind. Also involved are such theorists of therapy as Aaron
Beck (cognitive therapy) and Albert Ellis (rational emotive therapy). The followers of
George Kelly also find themselves in this camp. And the many people working on
personality trait research -- such as Buss and Plomin (temperament theory) and McCrae
and Costa (five factor theory) -- are essentially “cognitive behaviorists” like Bandura.

Walter Mischel

Walter Mischel (born 1930) is an American psychologist specializing in personality theory
and social psychology. He is the Robert Johnston Niven Professor of Humane Letters in the
Department of Psychology at Columbia University.

Early life

Mischel was born on February 22, 1930 in Vienna, Austria, from where he fled with his
family to the United States after the Nazi occupation in 1938. He grew up in Brooklyn, New
York and studied under George Kelly and Julian Rotter at Ohio State University, where he received his Ph.D. in clinical psychology in 1956.

**Professional career**

Mischel taught at the University of Colorado from 1956 to 1958, at Harvard University from 1958 to 1962, and at Stanford University from 1962 to 1983. Since 1983, Mischel has been in the Department of Psychology at Columbia University.

Mischel was elected to the National Academy of Sciences in 2004 and to the American Academy of Arts and Sciences in 1991. In 2007, Mischel was elected president of the Association for Psychological Science. Mischel’s other honors include the Distinguished Scientific Contribution Award from the American Psychological Association, the Distinguished Scientist Award of the Society of Experimental Social Psychologists, the Distinguished Contributions to Personality Award of the Society of Social and Personality Psychologists, and the Distinguished Scientist Award of American Psychological Association’s Division of Clinical Psychology. He is past editor of Psychological Review and past president of the American Psychological Association Division of Social and Personality Psychology and of the Association for Research in Personality.

Mischel is the recipient of the 2011 Grawemeyer Award in Psychology.

**Contributions to personality theory**

In 1968, Mischel published the now classic monograph, Personality and Assessment, which created a paradigm crisis in personality psychology that changed the agenda of the field for decades. Mischel showed that study after study failed to support the fundamental traditional assumption of personality theory, that an individual’s behavior with regard to a trait (e.g. conscientiousness, sociability) is highly consistent across diverse situations. Instead, Mischel’s analyses revealed that the individual’s behavior, when closely examined, was highly dependent upon situational cues, rather than expressed consistently across diverse situations that differed in meaning.

Mischel made the case that the field of personality psychology was searching for consistency in the wrong places. Instead of treating situations as the noise or “error of measurement” in personality psychology, Mischel’s work proposed that by including the situation as it is perceived by the person and by analyzing behavior in its situational context, the consistencies that characterize the individual would be found. He argued that these individual differences would not be expressed in consistent cross-situational behavior, but instead, he suggested that consistency would be found in distinctive but stable patterns of if-then “situation-behavior” relations that form contextualized, psychologically meaningful “personality signatures” (e.g., “she does A when X, but B when Y”).

These signatures of personality were in fact revealed in a large observational study of social behavior across multiple repeated situations over time (Mischel & Shoda, 1995).
Contradicting the classic assumptions, the data showed that individuals who were similar in average levels of behavior, for example in their aggression, nevertheless differed predictably and dramatically in the types of situations in which they aggressed. As predicted by Mischel, they were characterized by highly psychologically informative if-then behavioral signatures. Collectively, this work has allowed a new way to conceptualize and assess both the stability and variability of behavior that is produced by the underlying personality system, and has opened a window into the dynamic processes within the system itself (Mischel, 2004).

In a second direction, beginning in the late 1960s and early 1970s, Mischel pioneered work illuminating the ability to delay gratification and to exert self-control in the face of strong situational pressures and emotionally “hot” temptations. His studies with preschoolers in the late 1960s, often referred to as "the marshmallow experiment", examined the processes and mental mechanisms that enable a young child to forego immediate gratification and to wait instead for a larger desired but delayed reward. Continuing research with these original participants has examined how preschool delay of gratification ability links to development over the life course, and may predict a variety of important outcomes (e.g., SAT scores, social and cognitive competence, educational attainment, and drug use), and can have significant protective effects against a variety of potential vulnerabilities. This work also opened a route to research on temporal discounting in decision-making, and most importantly into the mental mechanisms that enable cognitive and emotional self-control, thereby helping to demystify the concept of “willpower” (Mischel et al., 1989; Mischel & Ayduk, 2004).

Stanford marshmallow experiment

The Stanford marshmallow experiment was a study on deferred gratification. The experiment was conducted in 1972 by psychologist Walter Mischel of Stanford University. The experiment has been repeated many times since, and the original study at Stanford has been "regarded as one of the most successful behavioural experiments". In the study, a marshmallow was offered to each child. If the child could resist eating the marshmallow, he was promised two instead of one. The scientists analyzed how long each child resisted the temptation of eating the marshmallow, and whether or not doing so had an effect on their future success. The results provided researchers with great insight on the psychology of self control.

Original experiment

Origins

The experiment has its roots in an earlier one performed on Trinidad, where Mischel noticed that the different ethnic groups living on the island had contrasting stereotypes of one another, specifically, on the other’s perceived recklessness, self control, and ability to have fun. He performed an experiment similar to the marshmallow experiment, albeit with
a chocolate bar, and discovered that ethnicity did not affect deferred gratification at all, while social and economic backgrounds did.

**Stanford experiment**

The purpose of the original study was to understand when the control of deferred gratification, the ability to wait in order to obtain something that one wants, develops in children. The original experiment took place at the Bing Nursery School located at Stanford University, using children around the age of four to six as subjects. The children were led into a room, empty of distractions, where a treat of their choice (Oreo cookie, marshmallow, or pretzel stick) was placed on a table, by a chair. The children could eat the marshmallow, the researchers said, but if they waited for fifteen minutes without giving in to the temptation, they would be rewarded with a second marshmallow. Mischel observed as some would "cover their eyes with their hands or turn around so that they can't see the tray, others start kicking the desk, or tug on their pigtails, or stroke the marshmallow as if it were a tiny stuffed animal", while a few would simply eat the marshmallow as soon as the researchers left.

**Results**

While a few children would eat the marshmallow immediately, of the over 600 who took part in the experiment, one third could defer gratification long enough to get the second marshmallow. The experiment confirmed the hypothesis that age does determine the development of deferred gratification.

**Follow-up studies**

It was the results of the follow-up study, that would take place many years later, which surprised Mischel. Since Mischel's daughters knew and grew up with many of the original test subjects, through casual conversation, Mischel discovered there existed an unexpected correlation between the results of the marshmallow test, and the success of the children many years later. The first follow-up study, in 1988, showed that "preschool children who delayed gratification longer in the self-imposed delay paradigm, were described more than 10 years later by their parents as adolescents who were significantly more competent". A second follow-up study, in 1990, showed that the ability to delay gratification also correlated with higher SAT scores.
Big Five personality traits

In contemporary psychology, the "Big Five" factors (or Five Factor Model; FFM) of personality are five broad domains or dimensions of personality which are used to describe human personality.

The Big five factors are openness, conscientiousness, extraversion, agreeableness, and neuroticism (common acronyms are OCEAN, NEAO, or CANOE). The neuroticism factor is sometimes referred by its low pole – "emotional stability". Some disagreement remains about how to interpret the openness factor, which is sometimes called "intellect" rather than openness to experience. Beneath each factor, a cluster of correlated specific traits are found; For example, extraversion includes such related qualities as gregariousness, assertiveness, excitement seeking, warmth, activity and positive emotions.

The Five Factor Model is a descriptive model of personality; psychologists have developed a number of theories to account for the Big Five.

The five factors

The Big Five factors and their constituent traits can be summarized as (OCEAN):

- **Openness** – (inventive/curious vs. consistent/cautious). Appreciation for art, emotion, adventure, unusual ideas, curiosity, and variety of experience.
- **Conscientiousness** – (efficient/organized vs. easy-going/careless). A tendency to show self-discipline, act dutifully, and aim for achievement, planned rather than spontaneous behaviour.
- **Extraversion** – (outgoing/energetic vs. solitary/reserved). Energy, positive emotions, surgency, and the tendency to seek stimulation in the company of others.
- **Agreeableness** – (friendly/compassionate vs. cold/unkind). A tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others.
- **Neuroticism** – (sensitive/nervous vs. secure/confident). A tendency to experience unpleasant emotions easily, such as anger, anxiety, depression, or vulnerability.

The Big Five model is a comprehensive, empirical, data-driven research finding. Identifying the traits and structure of human personality has been one of the most fundamental goals in all of psychology. The five broad factors were discovered and defined by several independent sets of researchers (Digman, 1990). These researchers began by studying known personality traits and then factor-analyzing hundreds of measures of these traits (in self-report and questionnaire data, peer ratings, and objective measures from experimental settings) in order to find the underlying factors of personality.

The initial model was advanced by Ernest Tuples and Raymond Christal in 1961, but failed to reach an academic audience until the 1980s. In 1990, J.M. Digman advanced his five factor model of personality, which Goldberg extended to the highest level of organization.
(Goldberg, 1993). These five over-arching domains have been found to contain and subsume most known personality traits and are assumed to represent the basic structure behind all personality traits. These five factors provide a rich conceptual framework for integrating all the research findings and theory in personality psychology. The Big Five traits are also referred to as the "Five Factor Model" or FFM (Costa & McCrae, 1992), and as the Global Factors of personality (Russell & Karol, 1994).

At least four sets of researchers have worked independently for decades on this problem and have identified generally the same Big Five factors: Tuples & Cristal were first, followed by Goldberg at the Oregon Research Institute, Cattell at the University of Illinois, and Costa and McCrae at the National Institutes of Health. These four sets of researchers used somewhat different methods in finding the five traits, and thus each set of five factors has somewhat different names and definitions. However, all have been found to be highly inter-correlated and factor-analytically aligned.

Because the Big Five traits are broad and comprehensive, they are not nearly as powerful in predicting and explaining actual behavior as are the more numerous lower-level traits. Many studies have confirmed that in predicting actual behavior the more numerous facet or primary level traits are far more effective (e.g. Mershon & Gorsuch, 1988; Paunonen & Ashton, 2001)

When scored for individual feedback, these traits are frequently presented as percentile scores. For example, a Conscientiousness rating in the 80th percentile indicates a relatively strong sense of responsibility and orderliness, whereas an Extraversion rating in the 5th percentile indicates an exceptional need for solitude and quiet. Although these trait clusters are statistical aggregates, exceptions may exist on individual personality profiles. On average, people who register high in Openness are intellectually curious, open to emotion, interested in art, and willing to try new things. A particular individual, however, may have a high overall Openness score and be interested in learning and exploring new cultures but have no great interest in art or poetry.

The most frequently used measures of the Big Five comprise either items that are self-descriptive sentences or, in the case of lexical measures, items that are single adjectives. Due to the length of sentence-based and some lexical measures, short forms have been developed and validated for use in applied research settings where questionnaire space and respondent time are limited, such as the 40-item balanced International English Big-Five Mini-Markers or a very brief (10 item) measure of the Big Five domains.

**Openness to experience**

Openness is a general appreciation for art, emotion, adventure, unusual ideas, imagination, curiosity, and variety of experience. The trait distinguishes imaginative people from down-to-earth, conventional people. People who are open to experience are intellectually curious, appreciative of art, and sensitive to beauty. They tend to be, compared to closed people, more creative and more aware of their feelings. They are more likely to hold unconventional beliefs.
People with low scores on openness tend to have more conventional, traditional interests. They prefer the plain, straightforward, and obvious over the complex, ambiguous, and subtle. They may regard the arts and sciences with suspicion or even view these endeavors as uninteresting.

Sample openness items

- I have a rich vocabulary.
- I have a vivid imagination.
- I have excellent ideas.
- I am quick to understand things.
- I use difficult words.
- I spend time reflecting on things.
- I am full of ideas.
- I am not interested in abstractions. (reversed)
- I do not have a good imagination. (reversed)
- I have difficulty understanding abstract ideas. (reversed)

Conscientiousness

Conscientiousness is a tendency to show self-discipline, act dutifully, and aim for achievement against measures or outside expectations. The trait shows a preference for planned rather than spontaneous behavior. It influences the way in which we control, regulate, and direct our impulses.

Sample conscientiousness items

- I am always prepared.
- I pay attention to details.
- I get chores done right away.
- I like order.
- I follow a schedule.
- I am exacting in my work.
- I leave my belongings around. (reversed)
- I make a mess of things. (reversed)
- I often forget to put things back in their proper place. (reversed)
- I shirk my duties. (reversed)

Extraversion

Extraversion is characterized by positive emotions, surgency, and the tendency to seek out stimulation and the company of others. The trait is marked by pronounced engagement with the external world. Extraverts enjoy being with people, and are often perceived as full of energy. They tend to be enthusiastic, action-oriented individuals who are likely to say
"Yes!" or "Let's go!" to opportunities for excitement. In groups they like to talk, assert themselves, and draw attention to themselves.

Introverts lack the social exuberance and activity levels of extraverts. They tend to seem quiet, low-key, deliberate, and less involved in the social world. Their lack of social involvement should not be interpreted as shyness or depression. Introverts simply need less stimulation than extraverts and more time alone. They may be very active and energetic, simply not socially.

**Sample extraversion items**

- I am the life of the party.
- I don’t mind being the center of attention.
- I feel comfortable around people.
- I start conversations.
- I talk to a lot of different people at parties.
- I don't talk a lot. (reversed)
- I keep in the background. (reversed)
- I have little to say. (reversed)
- I don’t like to draw attention to myself. (reversed)
- I am quiet around strangers. (reversed)

**Agreeableness**

Agreeableness is a tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others. The trait reflects individual differences in general concern for social harmony. Agreeable individuals value getting along with others. They are generally considerate, friendly, generous, helpful, and willing to compromise their interests with others. Agreeable people also have an optimistic view of human nature. They believe people are basically honest, decent, and trustworthy.

Disagreeable individuals place self-interest above getting along with others. They are generally unconcerned with others’ well-being, and are less likely to extend themselves for other people. Sometimes their skepticism about others’ motives causes them to be suspicious, unfriendly, and uncooperative.

**Sample agreeableness items**

- I am interested in people.
- I sympathize with others’ feelings.
- I have a soft heart.
- I take time out for others.
- I feel others’ emotions.
- I make people feel at ease.
- I am not really interested in others. (reversed)
- I insult people. (reversed)
• I am not interested in other people's problems. (reversed)
• I feel little concern for others. (reversed)

**Neuroticism**

Neuroticism is the tendency to experience negative emotions, such as anger, anxiety, or depression. It is sometimes called emotional instability. Those who score high in neuroticism are emotionally reactive and vulnerable to stress. They are more likely to interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult. Their negative emotional reactions tend to persist for unusually long periods of time, which means they are often in a bad mood. These problems in emotional regulation can diminish the ability of a person scoring high on neuroticism to think clearly, make decisions, and cope effectively with stress.

At the other end of the scale, individuals who score low in neuroticism are less easily upset and are less emotionally reactive. They tend to be calm, emotionally stable, and free from persistent negative feelings. Freedom from negative feelings does not mean that low scorers experience a lot of positive feelings.

**Sample neuroticism items**

• I am easily disturbed.
• I change my mood a lot.
• I get irritated easily.
• I get stressed out easily.
• I get upset easily.
• I have frequent mood swings.
• I often feel blue.
• I worry about things.
• I am relaxed most of the time. (reversed)
• I seldom feel blue. (reversed)

**History**

**Early trait research**

Sir Francis Galton was the first scientist to recognize what is now known as the Lexical Hypothesis. This is the idea that the most salient and socially relevant personality differences in people’s lives will eventually become encoded into language. The hypothesis further suggests that by sampling language, it is possible to derive a comprehensive taxonomy of human personality traits.

In 1936, Gordon Allport and H. S. Odhert put this hypothesis into practice. They worked through two of the most comprehensive dictionaries of the English language available at the time and extracted 17,953 personality-describing words. They then reduced this
gigantic list to 4,504 adjectives which they believed were descriptive of observable and relatively permanent traits.

Raymond Cattell obtained the Allport-Odbert list in the 1940s, added terms obtained from psychological research, and then eliminated synonyms to reduce the total to 171. He then asked subjects to rate people whom they knew by the adjectives on the list and analyzed their ratings. Cattell identified 35 major clusters of personality traits which he referred to as the "personality sphere." He and his associates then constructed personality tests for these traits. The data they obtained from these tests were analyzed with the emerging technology of computers combined with the statistical method of factor analysis. This resulted in sixteen major personality factors, which led to the development of the 16PF Personality Questionnaire.

In 1961, two United States Air Force researchers, Ernest Tupes and Raymond Christal, analyzed personality data from eight large samples. Using Cattell's trait measures, they found five recurring factors, which they named "Surgency", "Agreeableness", "Dependability", "Emotional Stability", and "Culture". This work was replicated by Warren Norman, who also found that five major factors were sufficient to account for a large set of personality data. Norman named these factors Surgency, Agreeableness, Conscientiousness, Emotional Stability, and Culture. Raymond Cattell viewed these developments as an attack on his 16PF model and never agreed with the growing Five Factor consensus. He refers to "...the five factor heresy" which he considers "...is partly directed against the 16PF test". Responding to Goldberg's article in the American Psychologist, 'The Structure of Phenotypic Personality Traits', Cattell stated, "No experienced factorist could agree with Dr Goldberg's enthusiasm for the five factor personality theory". This determined rejection of the FFM challenge to his 16 factor model is presented in an article published towards the end of his life and entitled 'The fallacy of five factors in the personality sphere', Cattell, R. B. (1995), The Psychologist, The British Psychological Society, May Issue pp 207–208.

**Hiatus in research**

For the next two decades, the changing zeitgeist made publication of personality research difficult. In his 1968 book Personality and Assessment, Walter Mischel asserted that personality tests could not predict behavior with a correlation of more than 0.3. Social psychologists like Mischel argued that attitudes and behavior were not stable, but varied with the situation. Predicting behavior by personality tests was considered to be impossible.

Emerging methodologies challenged this point of view during the 1980s. Instead of trying to predict single instances of behavior, which was unreliable, researchers found that they could predict patterns of behavior by aggregating large numbers of observations. As a result correlations between personality and behavior increased substantially, and it was clear that “personality” did in fact exist. Personality and social psychologists now generally agree that both personal and situational variables are needed to account for human
behavior. Trait theories became justified, and there was a resurgence of interest in this area.

By 1980, the pioneering research by Tupes, Christal, and Norman had been largely forgotten by psychologists. Lewis Goldberg started his own lexical project, independently found the five factors once again, and gradually brought them back to the attention of psychologists. He later coined the term "Big Five" as a label for the factors.

Validity of the Big Five

In a 1981 symposium in Honolulu, four prominent researchers, Lewis Goldberg, Naomi Takemoto-Chock, Andrew Comrey, and John M. Digman, reviewed the available personality tests of the day. They concluded that the tests which held the most promise measured a subset of five common factors, just as Norman had discovered in 1963. This event was followed by widespread acceptance of the five factor model among personality researchers during the 1980s. Peter Saville and his team, it has subsequently been claimed, included the five-factor “Pentagon” model with the original OPQ in 1984. Yet, according to Helen Baron, herself a senior member of the SHL team, in defending the OPQ against the criticisms of some of the UKs most influential psychometrically informed psychologists, stated that "attempt at confirmatory factor analysis (of OPQ scales) is misguided .......they are merely collections of scales which relate to different aspects of behaviour"[]. In fact there is no reference at all to the Five Factor Model in the OPQ32 Manual, even under the headings 'OPQ32 and the OPQ model of personality' or 'OPQ development'. Even the supplement added to the OPQ Manual in 2005 recognises that "the OPQ was not developed specifically to fit the FFM model." The first FFM personality questionnaire to be published was the The NEO five-factor personality inventory, published by Costa and McCrae in 1985. The Hogan Personality Inventory (HPI), designed specifically for use in occupational assessments, had been used in occupational research by Robert and Joyce Hogan since the 1970s and was the basis of numerous organisational research papers presented at APA and SIOP conferences. Their research over two decades and their passionate advocacy for the use of personality assessment in Industrial and Organisational psychology had far reaching impact in reversing the influence of Walter Mischel and the situationalists as well as in promoting wide interest in the FFM model. The HPI was first published commercially in 1986.

One of the most significant advances of the five-factor model was the establishment of a common taxonomy that demonstrates order in a previously scattered and disorganized field. What separates the five-factor model of personality from all others is that it is not based on the theory of any one particular psychologist, but rather on language.

A number of meta-analyses have confirmed the predictive value of the Big Five across a wide range of behaviors. Saulsman and Page examined the relationships between the Big Five personality dimensions and each of the 10 personality disorder categories in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Across 15 independent samples, the researchers found that each disorder displayed a unique and predictable five-factor profile. The most prominent and consistent personality predictors underlying the
disorders were positive associations with Neuroticism and negative associations with Agreeableness.

In the area of job performance, Barrick and Mount reviewed 117 studies utilizing 162 samples with 23,994 participants. They found that conscientiousness showed consistent relations with all performance criteria for all occupational groups. Extraversion was a valid predictor for occupations involving social interaction (e.g. management and sales). Furthermore, extraversion and openness to experience were valid predictors of training proficiency criteria.

Selected scientific findings

Ever since the 1990s when the consensus of psychologists gradually came to support the Big Five, there has been a growing body of research surrounding these personality traits (see for instance, Robert Hogan’s edited book "Handbook of Personality Psychology" (Academic Press, 1997).

Heritability

All five factors show an influence from both heredity and environment. Studies of twins suggest that these effects contribute in roughly equal proportion. Of four recent twin studies, the mean estimated broad heritabilities on self-report measures for the Big Five traits were as follows:

<table>
<thead>
<tr>
<th>Domain</th>
<th>Heritability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness to Experience</td>
<td>57%</td>
</tr>
<tr>
<td>Extraversion</td>
<td>54%</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>49%</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>48%</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>42%</td>
</tr>
</tbody>
</table>

Development

Many studies of longitudinal data, which correlate people's test scores over time, and cross-sectional data, which compare personality levels across different age groups, show a high degree of stability in personality traits during adulthood. More recent research and meta-analyses of previous studies, however, indicate that change occurs in all five traits at various points in the lifespan. The new research shows evidence for a maturation effect. On average, levels of Agreeableness and Conscientiousness typically increase with time, whereas Extraversion, Neuroticism, and Openness tend to decrease. In addition to these group effects, there are individual differences; different people demonstrate unique patterns of change at all stages of life.

Gender differences
Cross-cultural research from 26 nations (N = 23,031 subjects) and again in 55 nations (N = 17,637 subjects) has shown a universal pattern of sex differences on responses to the Big Five Inventory. Women consistently report higher Neuroticism and Agreeableness, and men often report higher Extraversion and Conscientiousness. Sex differences in personality traits are largest in prosperous, healthy, and egalitarian cultures in which women have more opportunities that are equal to those of men. Both men and women tend to grow more extraverted and conscientious and less neurotic and agreeable as cultures grow more prosperous and egalitarian, but the effect is stronger for men.

**Birth order**

The suggestion has often been made that individuals differ by the order of their births. Frank J. Sulloway argues that birth order is correlated with personality traits. He claims that firstborns are more conscientious, more socially dominant, less agreeable, and less open to new ideas compared to laterborns.

However, Sulloway's case has been called into question. One criticism is that his data confounds family size with birth order. Subsequent analyses have shown that birth order effects are only found in studies where the subjects’ personality traits are rated by family members (such as siblings or parents) or by acquaintances familiar with the subjects’ birth order. Large scale studies using random samples and self-report personality tests like the NEO PI-R have found no significant effect of birth order on personality.

**Cross-cultural research**

The Big Five have been replicated in a variety of different languages and cultures, such as German, Chinese, Indian, etc. Thompson has demonstrated the Big Five structure across several cultures using an international English language scale.

Recent work has found relationships between Geert Hofstede’s cultural factors, Individualism, Power Distance, Masculinity, and Uncertainty Avoidance, with the average Big Five scores in a country. For instance, the degree to which a country values individualism correlates with its average Extraversion, while people living in cultures which are accepting of large inequalities in their power structures tend to score somewhat higher on Conscientiousness. The reasons for these differences are as yet unknown; this is an active area of research.

**Non-humans**

The big five personality factors have been assessed in some non-human species. In one series of studies, human ratings of chimpanzees using the Chimpanzee Personality Questionnaire (CPQ) revealed factors of extraversion, conscientiousness and agreeableness – as well as an additional factor of dominance – across hundreds of chimpanzees in zoological parks, a large naturalistic sanctuary and a research laboratory. Neuroticism and Openness factors were found in an original zoo sample, but did not replicate in a new zoo sample or to other settings (perhaps reflecting the design of the CPQ).
Criticisms

Much research has been conducted on the Big Five. This has resulted in both criticism and support for the model. Critics argue that there are limitations to the scope of Big Five as an explanatory or predictive theory. It is argued that the Big Five does not explain all of human personality. The methodology used to identify the dimensional structure of personality traits, factor analysis, is often challenged for not having a universally-recognized basis for choosing among solutions with different numbers of factors. Another frequent criticism is that the Big Five is not theory-driven. It is merely a data-driven investigation of certain descriptors that tend to cluster together under factor analysis.

Limited scope

One common criticism is that the Big Five does not explain all of human personality. Some psychologists have dissented from the model precisely because they feel it neglects other domains of personality, such as Religiosity, Manipulativeness/Machiavellianism, Honesty, Self-Awareness, Thriftiness, Conservativeness, Critical Judgement, Masculinity/Femininity, Snobbishness, Sense of humour, Identity, Self-concept, and Motivation. Correlations have been found between some of these variables and the Big Five, such as the inverse relationship between political conservatism and Openness; although variation in these traits is not well explained by the Five Factors themselves. McAdams has called the Big Five a "psychology of the stranger," because they refer to traits that are relatively easy to observe in a stranger; other aspects of personality that are more privately held or more context-dependent are excluded from the Big Five.

In many studies, the five factors are not fully orthogonal to one another; that is, the five factors are not independent. Negative correlations often appear between Neuroticism and Extraversion, for instance, indicating that those who are more prone to experiencing negative emotions tend to be less talkative and outgoing. Orthogonality is viewed as desirable by some researchers because it minimizes redundancy between the dimensions. This is particularly important when the goal of a study is to provide a comprehensive description of personality with as few variables as possible.

Methodological issues

The methodology used to identify the dimensional structure of personality traits, factor analysis, is often challenged for not having a universally-recognized basis for choosing among solutions with different numbers of factors. That is, a five factor solution depends on some degree of interpretation by the analyst. A larger number of factors may, in fact, underlie these five factors. This has led to disputes about the "true" number of factors. Big Five proponents have responded that although other solutions may be viable in a single dataset, only the five factor structure consistently replicates across different studies.

A methodological criticism often directed at the Big Five is that much of the evidence relies on self report questionnaires; self-report bias and falsification of responses are difficult to
deal with and account for. This becomes especially important when considering why scores may differ between individuals or groups of people – differences in scores may represent genuine underlying personality differences, or they may simply be an artifact of the way the subjects answered the questions. The five factor structure has been replicated in peer reports. However, many of the substantive findings rely on self-reports.

**Theoretical status**

A frequent criticism is that the Big Five is not based on any underlying theory; it is merely an empirical finding that certain descriptors cluster together under factor analysis. While this does not mean that these five factors don’t exist, the underlying causes behind them are unknown. Sensation seeking and cheerfulness are not linked to Extraversion because of an underlying theory; this relationship is an empirical finding to be explained.

Jack Block's final published work before his death in January 2010 drew together his lifetime perspective on the five factor model

**He summarised his critique of the model in terms of:**

- the atheoretical nature of the five-factors
- their "cloudy" measurement
- the model's inappropriateness for studying early childhood
- the use of factor analysis as the exclusive paradigm for conceptualizing personality
- the continuing non-consensual understandings of the five-factors
- the existence of various unrecognised but successful efforts to specify aspects of character not subsumed by the five-factors

He went on to suggest that repeatedly observed higher order factors hierarchically above the proclaimed five may promise deeper biological understanding of the origins and implications of these superfactors.

**Further research**

Current research concentrates on a number of areas. One important question is: are the five factors the right ones? Attempts to replicate the Big Five in other countries with local dictionaries have succeeded in some countries but not in others. Apparently, for instance, Hungarians don’t appear to have a single Agreeableness factor. Other researchers find evidence for Agreeableness but not for other factors.

In an attempt to explain variance in personality traits more fully, some have found seven factors, some eighteen, and some only three. What determines the eventual number of factors is essentially the kind of information that is put into the factor analysis in the first place (i.e. the "Garbage in, Garbage out" principle). Since theory often implicitly precedes empirical science (such as factor analysis), the Big Five and other proposed factor structures should always be judged according to the items that went into the factor analytic algorithm. Recent studies show that seven- or eighteen-factor models have their relative
strengths and weaknesses in explaining variance in DSM-based symptom counts in nonclinical samples and in psychiatric patients and do not seem to be clearly outperformed by the Big Five.

A validation study, in 1992, conducted by Paul Sinclair and Steve Barrow, involved 202 Branch Managers from the then TSB Bank. It found several significant correlations with job performance across 3 of the Big Five scales. The correlations ranged from .21 – .33 and were noted across 3 scales: High Extraversion, Low Neuroticism and High Openness to Experience.

Another area of investigation is to make a more complete model of personality. The "Big Five" personality traits are empirical observations, not a theory; the observations of personality research remain to be explained. Costa and McCrae have built what they call the Five Factor Theory of Personality as an attempt to explain personality from the cradle to the grave. They don't follow the lexical hypothesis, though, but favor a theory-driven approach inspired by the same sources as the sources of the Big Five.

Another area of investigation is the downward extension of Big Five theory, or the Five Factor Model, into childhood. Studies have found Big Five personality traits to correlate with children's social and emotional adjustment and academic achievement. More recently, the Five Factor Personality Inventory – Children was published extending assessment between the ages of 9 and 18. Perhaps the reason for this recent publication was the controversy over the application of the Five Factor Model to children. Studies by Oliver P. John et al. with adolescent boys brought two new factors to the table: "Irritability" and "Activity". In studies of Dutch children, those same two new factors also became apparent. These new additions "suggest that the structure of personality traits may be more differentiated in childhood than in adulthood", which would explain the recent research in this particular area.

Rushton, Bons, and Hur (2008) argued that there is a single "general factor of personality" (compare general intelligence factor), based on the r/K selection theory as described in Rushton's book Race, Evolution, and Behavior, that underlies the Big Five. Rushton and different colleagues have in several more studies argued that this general factor is empirically supported. The factor was also related to emotional intelligence and humor. Amigó and colleagues also found support for the theory. Rushton and colleagues (2010) have also argued that this general factor of personality is a factor in personality disorders. Erdle and Rushton (2010) argued that the underlying biological mechanism for this personality factor may be differences in J. A. Gray's Behavioral Inhibition System and Behavioral Activation System, finding support for this from analyzing self-reported expectancies of reward and punishment, self-esteem, and positive and negative affect. Veselka and colleagues (2009) also found support for the general factor of personality and that it is partially heritable. Linden and colleagues (2010) found that the general factor of personality was a predictor of likeability and popularity among classmates.
Openness to experience

Openness to experience is one of the domains which are used to describe human personality in the Five Factor Model. Openness involves active imagination, aesthetic sensitivity, attentiveness to inner feelings, preference for variety, and intellectual curiosity. A great deal of psychometric research has demonstrated that these qualities are statistically correlated. Thus, openness can be viewed as a global personality trait consisting of a set of specific traits, habits, and tendencies that cluster together.

Openness tends to be normally distributed with a small number of individuals scoring extremely high or low on the trait, and most people scoring near the average. People who score low on openness are considered to be closed to experience. They tend to be conventional and traditional in their outlook and behavior. They prefer familiar routines to new experiences, and generally have a narrower range of interests.

People who are open to experience are no different in mental health from people who are closed to experience. There is no relationship between openness and neuroticism, or any other measure of psychological wellbeing. Being open and closed to experience are simply two different ways of relating to the world.

Measurement

The NEO PI-R personality test measures six facets or elements of openness to experience:

- Fantasy - the tendency toward a vivid imagination and fantasy life.
- Aesthetics - the tendency to appreciate art, music, and poetry.
- Feelings - being receptive to inner emotional states and valuing emotional experience.
- Actions - the inclination to try new activities, visit new places, and try new foods.
- Ideas - the tendency to be intellectually curious and open to new ideas.
- Values - the readiness to re-examine traditional social, religious, and political values.

Openness has also been measured, along with all the other Big Five personality traits, on Goldberg's International Personality Item Pool (IPIP). The Myers-Briggs Type Indicator (MBTI) measures the preference of "intuition," which is related to openness to experience.

According to research by Sam Gosling, it is possible to assess openness by examining people's homes and work spaces. Individuals who are highly open to experience tend to have distinctive and unconventional decorations. They are also likely to have books on a wide variety of topics, a diverse music collection, and works of art on display.

Psychological aspects

Openness to experience correlates with creativity, as measured by tests of divergent thinking. Openness is also associated with crystallized intelligence, but not fluid
intelligence. These mental abilities may come more easily when people are dispositionally curious and open to learning. However, openness is only weakly related to general intelligence. Openness to experience is related to need for cognition, a motivational tendency to think about ideas, scrutinize information, and enjoy solving puzzles.

There are social and political implications to this personality trait. People who are highly open to experience tend to be politically liberal and tolerant of diversity. As a consequence, they are generally more open to different cultures and lifestyles. They are lower in ethnocentrism and right-wing authoritarianism.

Openness to experience was found to be associated with life satisfaction in older adults after controlling for confounding factors.

**Genes and physiology**

Openness to experience, like the other traits in the five factor model, is believed to have a genetic component. Identical twins (who have the same DNA) show similar scores on openness to experience, even when they have been adopted into different families and raised in very different environments. One genetic study with 86 subjects found Openness to experience related to the 5-HTTLPR polymorphism associated with the serotonin transporter gene.

Higher levels of openness have been linked to activity in the ascending dopaminergic system and the dorsolateral prefrontal cortex. Openness is the only personality trait that correlates with neuropsychological tests of dorsolateral prefrontal cortical function, supporting theoretical links among openness, cognitive functioning, and IQ.

**Geography**

An Italian study found that people who lived on Tyrrhenian islands tended to be less open to experience than those living on the nearby mainland, and that people whose ancestors had inhabited the islands for twenty generations tended to be less open to experience than more recent arrivals. Additionally, people who emigrated from the islands to the mainland tended to be more open to experience than people that stayed on the islands, and than those that immigrated to the islands.

People living in the eastern and western parts of the United States tend to score higher on openness to experience than those living in the midwest and the south. The highest average scores on openness are found in the states of New York, Oregon, Massachusetts, Washington, and California. Lowest average scores come from North Dakota, Wyoming, Alaska, Alabama, and Wisconsin.

**Drug use**

Psychologists in the early 1970s used the concept of openness to experience to describe people who are more likely to use marijuana. Openness was defined in these studies as
high creativity, adventuresomeness, internal sensation novelty seeking, and low authoritarianism. Several correlational studies confirmed that young people who score high on this cluster of traits are more likely to use marijuana. More recent research has replicated this finding using contemporary measures of openness.

Conscientiousness

Conscientiousness is the trait of being painstaking and careful or the quality of acting according to the dictates of one's conscience. It includes such elements as self-discipline, carefulness, thoroughness, organization, deliberation (the tendency to think carefully before acting), and need for achievement. It is an aspect of what has traditionally been called character. Conscientious individuals are generally hard working and reliable. When taken to an extreme, they may also be workaholics, perfectionists, and compulsive in their behavior. People who are low on conscientiousness are not necessarily lazy or immoral, but they tend to be more laid back, less goal oriented, and less driven by success.

Personality models

Conscientiousness is one of five superordinate traits in the "Big Five model" of personality which also consists of extraversion, neuroticism, openness to experience, and agreeableness. Two personality tests that assess these traits are Costa and McCrae’s NEO PI-R and Goldberg’s NEO-PIP. According to these models, conscientiousness is considered to be a continuous dimension of personality, rather than a categorical "type" of person. Scores in conscientiousness follow a normal distribution.

Conscientiousness is related to impulse control, but it should not be confused with the problems of impulse control found in neuroticism. People high on neurotic impulsiveness find it difficult to resist temptation or delay gratification. Individuals who are low on conscientious self-discipline are unable to motivate themselves to perform a task that they would like to accomplish. These are conceptually similar but empirically distinct.

The trait cluster of conscientiousness overlaps with other models of personality, such as C. Robert Cloninger's Temperament and Character Inventory, in which it is called self-directedness. It also includes the specific traits of rule consciousness and perfectionism in Cattell's 16 PF model. Many of the behaviors associated with conscientiousness fall under the broad category of emotional intelligence. Traits associated with conscientiousness are frequently assessed by self-report integrity tests given by various corporations to prospective employees.

Behavior

People who score high on the trait of conscientiousness tend to be more organized and less cluttered in their homes and offices. For example, their books tend to be neatly shelved in alphabetical order, or categorized by topic, rather than scattered around the room. Their clothes tend to be folded and arranged in drawers or closets instead of lying on the floor.
The presence of planners and to-do lists are also signs of conscientiousness. Their homes tend to have better lighting than the homes of people who are low on this trait.

Conscientiousness is related to successful academic performance in students. Low levels of conscientiousness are strongly associated with procrastination. A considerable amount of research indicates that conscientiousness is one of the best predictors of performance in the workplace. And indeed that after general mental ability is taken into account, the other four of the Big Five personality traits do not aid in predicting career success. Conscientious employees are generally more reliable, more motivated, and harder working. Furthermore, conscientiousness is the only personality trait that correlates with performance across all categories of jobs. However, agreeableness and emotional stability may also be important, particularly in jobs that involve a significant amount of social interaction.

Although conscientiousness is generally seen as a positive trait to possess, recent research has suggested that in some situations it may be harmful for well-being. In a prospective study of 9570 individuals over four years, highly conscientious people suffered more than twice as much if they became unemployed. The authors suggested this may be due to conscientious people making different attributions about why they became unemployed, or through experiencing stronger reactions following failure. This finding is consistent with perspectives which see no trait as inherently positive or negative, but rather the consequences of the trait being dependant on the situation and concomitant goals and motivations.

**Geography**

Average levels of conscientiousness vary by state in the United States. People living in the central part of the country, including the states of Kansas, Nebraska, Oklahoma, and Missouri tend to have higher scores on average than people living in other regions. People in the southwestern states of New Mexico, Utah, and Arizona also have relatively high average scores on conscientiousness. Among the eastern states, Florida is the only one that scores in the top ten for this personality trait. The four states with the lowest scores on conscientiousness on average were, in descending order, Rhode Island, Hawaii, Maine, and Alaska.

**Extraversion and introversion**

The trait of extraversion-introversion is a central dimension of human personality.

Extraverts (also spelled extroverts) tend to be gregarious, assertive, and interested in seeking out excitement. Introverts, in contrast, tend to be more reserved, less outgoing, and less sociable. They are not necessarily loners but they tend to have fewer numbers of friends. Introversion does not describe social discomfort but rather social preference: an introvert may not be shy but may merely prefer less social activities. Ambiversion is a balance of extrovert and introvert characteristics.
The terms introversion and extraversion were first popularized by Carl Jung. Virtually all comprehensive models of personality include these concepts. Examples include Jung’s analytical psychology, Eysenck’s three-factor model, Cattell’s 16 personality factors, the Big Five personality traits, the four temperaments, the Minnesota Multiphasic Personality Inventory, the Myers Briggs Type Indicator, and Socionics.

Extraversion and introversion are typically viewed as a single continuum. Thus, to be high on one is necessarily to be low on the other. Carl Jung and the authors of the Myers-Briggs provide a different perspective and suggest that everyone has both an extraverted side and an introverted side, with one being more dominant than the other. In any case, people fluctuate in their behavior all the time, and even extreme introverts and extraverts do not always act according to their type.

Varieties

Extraversion

Extraversion is "the act, state, or habit of being predominantly concerned with and obtaining gratification from what is outside the self". Extraverts tend to enjoy human interactions and to be enthusiastic, talkative, assertive, and gregarious. They take pleasure in activities that involve large social gatherings, such as parties, community activities, public demonstrations, and business or political groups. Politics, teaching, sales, managing and brokering are fields that favor extraversion. An extraverted person is likely to enjoy time spent with people and find less reward in time spent alone. They tend to be energized when around other people, and they are more prone to boredom when they are by themselves.

Introversion

Introversion is "the state of or tendency toward being wholly or predominantly concerned with and interested in one's own mental life". Introverts are people whose energy tends to expand through reflection and dwindle during interaction. Introverts tend to be more reserved and less outspoken in large groups. They often take pleasure in solitary activities such as reading, writing, music, drawing, tinkering, playing video games, watching movies and plays, and using computers, along with some more reserved outdoor activities such as fishing. In fact, social networking sites have been a thriving home for introverts in the 21st century, where introverts are free from the formalities of social conduct and may become more comfortable blogging about personal feelings they would not otherwise disclose. The archetypal artist, writer, sculptor, engineer, composer, and inventor are all highly introverted. An introvert is likely to enjoy time spent alone and find less reward in time spent with large groups of people, though he or she may enjoy interactions with close friends. Trust is usually an issue of significance: a virtue of utmost importance to an introvert choosing a worthy companion. They prefer to concentrate on a single activity at a time and like to observe situations before they participate, especially observed in developing children and adolescents. Introverts are easily overwhelmed by too much
stimulation from social gatherings and engagement. They are more analytical before speaking.

Introversion is not the same as being shy or being a social outcast. Introverts prefer solitary activities over social ones, whereas shy people (who may be extraverts at heart) avoid social encounters out of fear, and the social outcast has little choice in the matter of his or her solitude.

**Ambiversion**

Although many people view being introverted or extraverted as a question with only two possible answers, most contemporary trait theories (e.g. the Big Five) measure levels of extraversion-introversion as part of a single, continuous dimension of personality, with some scores near one end, and others near the half-way mark. Ambiversion is a term used to describe people who fall more or less directly in the middle and exhibit tendencies of both groups. An ambivert is normally comfortable with groups and enjoys social interaction, but also relishes time alone and away from the crowd.

**Measurement**

Assessing extraversion and introversion is normally accomplished through self reporting. A questionnaire might ask if the test-taker agrees or disagrees with statements such as I am the life of the party or I think before I talk.

Self-report questionnaires have obvious limitations in that people may misrepresent themselves either intentionally or through lack of self-knowledge. As such, it is also common to use peer reporting or third-party observation.

Another approach is to present test takers with various sets of adjectives (e.g., thoughtful, talkative, energetic, independent) and ask which describes them most and least. Psychological measures of this trait may break it down into subfactors including warmth, affiliation, positive affect, excitement seeking, and assertiveness/dominance seeking.

**Causes**

**Jungian theory**

According to Carl Jung, introversion and extraversion refer to the direction of psychic energy. If a person’s psychic energy usually flows outwards then he or she is an extravert, while if the energy usually flows inwards, the person is an introvert. Extraverts feel an increase of perceived energy when interacting with a large group of people, but a decrease of energy when left alone. Conversely, introverts feel an increase of energy when alone, but a decrease of energy when surrounded by a large group of people.

**Eysenck's theory**
Hans Eysenck described extraversion-introversion as the degree to which a person is outgoing and interactive with other people. These behavioral differences are presumed to be the result of underlying differences in brain physiology. Extraverts seek excitement and social activity in an effort to heighten their arousal level, whereas introverts tend to avoid social situations in an effort to keep such arousal to a minimum. Eysenck designated extraversion as one of three major traits in his P-E-N model of personality, which also includes psychoticism and neuroticism.

Eysenck originally suggested that extraversion was a combination of two major tendencies, impulsiveness and sociability. He later added several other more specific traits, namely liveliness, activity level, and excitation. These traits are further linked in his personality hierarchy to even more specific habitual responses, such as partying on the weekend.

Eysenck compared this trait to the four temperaments of ancient medicine, with choleric and sanguine temperaments equating to extraversion, and melancholic and phlegmatic temperaments equating to introversion.

**Twin studies find that extraversion/introversion has a genetic component.**

**Biological factors**

The relative importance of nature versus environment in determining the level of extraversion is controversial and the focus of many studies. Twin studies find a genetic component of 39% to 58%. In terms of the environmental component, the shared family environment appears to be far less important than individual environmental factors that are not shared between siblings.

Eysenck proposed that extraversion was caused by variability in cortical arousal. He hypothesized that introverts are characterized by higher levels of activity than extraverts and so are chronically more cortically aroused than extraverts. The fact that extraverts require more external stimulation than introverts has been interpreted as evidence for this hypothesis. Other evidence of the "stimulation" hypothesis is that introverts salivate more than extraverts in response to a drop of lemon juice.

Extraversion has been linked to higher sensitivity of the mesolimbic dopamine system to potentially rewarding stimuli. This in part explains the high levels of positive affect found in extraverts, since they will more intensely feel the excitement of a potential reward. One consequence of this is that extraverts can more easily learn the contingencies for positive reinforcement, since the reward itself is experienced as greater.

One study found that introverts have more blood flow in the frontal lobes of their brain and the anterior or frontal thalamus, which are areas dealing with internal processing, such as planning and problem solving. Extraverts have more blood flow in the anterior cingulate gyrus, temporal lobes, and posterior thalamus, which are involved in sensory and emotional experience. This study and other research indicates that introversion-extraversion is related to individual differences in brain function.
Behavior

Extraverts and introverts have a variety of behavioral differences. According to one study, extraverts tend to wear more decorative clothing, whereas introverts prefer practical, comfortable clothes. Extraverts are likely to prefer more upbeat, conventional, and energetic music than introverts. Personality also influences how people arrange their work areas. In general, extraverts decorate their offices more, keep their doors open, keep extra chairs nearby, and are more likely to put dishes of candy on their desks. These are attempts to invite co-workers and encourage interaction. Introverts, in contrast, decorate less and tend to arrange their workspace to discourage social interaction.

Although extraverts and introverts have real personality and behavior differences, it is important to avoid pigeonholing or stereotyping by personality. Humans are complex and unique, and because extraversion varies along a continuum, they may have a mixture of both orientations. A person who acts introverted in one scenario may act extraverted in another, and people can learn to act “against type” in certain situations. Jung’s theory states that when someone’s primary function is extraverted, his secondary function is always introverted (and vice versa).

Implications

Acknowledging that introversion and extraversion are normal variants of behavior can help in self-acceptance and understanding of others. For example, an extravert can accept her introverted partner’s need for space, while an introvert can acknowledge his extraverted partner’s need for social interaction.

Researchers have found a correlation between extraversion and happiness. That is, more extraverted people tend to report higher levels of happiness than introverts. This does not mean that introverts are unhappy. Extraverts simply report experiencing more positive emotions, whereas introverts tend to be closer to neutral. This may be due to the fact that extraversion is socially preferable in Western culture and thus introverts feel less desirable. In addition to the research on happiness, other studies have found that extraverts tend to report higher levels of self-esteem than introverts. Others suggest that such results reflect socio-cultural bias in the survey itself. Also, according to Carl Jung, introverts acknowledge more readily their psychological needs and problems, whereas extroverts tend to be oblivious to them because they focus more on the outer world.

Extraversion is perceived as socially desirable in Western culture, but it is not always an advantage. For example, extraverted youths are more likely to engage in delinquent behavior. Conversely, while introversion is perceived as less socially desirable, it is strongly associated with positive traits such as intelligence and “giftedness.” For many years, researchers have found that introverts tend to be more successful in academic environments, which extraverts may find boring.
Career counselors often use personality traits, along with other factors such as skill and interest, to advise their clients. Some careers such as computer programming may be more satisfying for an introverted temperament, while other areas such as sales may be more agreeable to the extraverted type.

Although neither introversion nor extraversion is pathological, psychotherapists can take temperament into account when treating clients. Clients may respond better to different types of treatment depending on where they fall on the introversion/extraversion spectrum. Teachers can also consider temperament when dealing with their pupils, for example acknowledging that introverted children need more encouragement to speak in class while extraverted children may grow restless during long periods of quiet study.

**Geography**

It is asserted that Americans live in an "extroverted society" that rewards extrovert behavior and rejects introversion. "American culture values extroverted qualities more, and people often feel like they've been given the 'short end of the stick' after receiving their results on extroversion/introversion tests." Other cultures, such as Central Europe, Japan or regions where Buddhism, Sufism etc. prevail, prize introversion.

Researchers have found that people who live on islands tend to be less extraverted (more introverted) than those living on the mainland, and that people whose ancestors had inhabited the island for twenty generations tend to be less extraverted than more recent arrivals. Furthermore, people who emigrate from islands to the mainland tend to be more extraverted than people that stay on islands, and those that immigrate to islands.

In the United States, researchers have found that people living in the midwestern states of North Dakota, South Dakota, Nebraska, Minnesota, Wisconsin, and Illinois score higher than the U.S. average on extraversion. Utah and the southeastern states of Florida and Georgia also score high on this personality trait. The most introverted states in the United States are Maryland, New Hampshire, Alaska, Washington, and Vermont. People who live in the northwestern states of Idaho, Montana, and Wyoming are also relatively introverted.

**Agreeableness**

Agreeableness is a tendency to be pleasant and accommodating in social situations. In contemporary personality psychology, agreeableness is one of the five major dimensions of personality structure, reflecting individual differences in concern for cooperation and social harmony. People who score high on this dimension are empathetic, considerate, friendly, generous, and helpful. They also have an optimistic view of human nature. They tend to believe that most people are honest, decent, and trustworthy.

People scoring low on agreeableness are generally less concerned with others’ well-being, report less empathy, and are therefore less likely to go out of their way to help others. Their skepticism about other people’s motives may cause them to be suspicious and
unfriendly. People very low on agreeableness have a tendency to be manipulative in their social relationships. They are more likely to compete than to cooperate.

Agreeableness is considered to be a superordinate trait, meaning that it is a grouping of more specific personality traits that cluster together statistically. There are exceptions, but in general, people who are concerned about others also tend to cooperate with them, help them out, and trust them. This dimension of personality was initially discovered in research using the method of factor analysis.

Agreeableness can be viewed as the opposite of Machiavellianism. It is also similar conceptually to Alfred Adler’s idea of social interest.

Interpersonal relations

Agreeableness is an asset in a wide range of social situations. Agreeable individuals are biased toward liking others and viewing them in a positive light, whereas disagreeable people are more negative. Despite the label, there is no evidence that those high on agreeableness are more conforming, or influenced by others in making choices, than are their peers.

Because agreeable children are more sensitive to the needs and perspectives of others, they are less likely to suffer from social rejection. Specifically, the research indicates that children who are less disruptive, less aggressive, and more skilled at entering play groups are more likely to gain acceptance by their peers.

One study found that people high in agreeableness are more emotionally responsive in social situations. This effect was measured on both self-report questionnaires and physiological measures, and offers evidence that extraversion and neuroticism are not the only Big Five personality factors that influence emotion. The effect was especially pronounced among women.

The research also shows that people high in agreeableness are more likely to control negative emotions like anger in conflict situations. Those who are high in agreeableness are more likely to use constructive tactics when in conflict with others, whereas people low in agreeableness are more likely to use coercive tactics. They are also more willing to give ground to their adversary and may "lose" arguments with people who are less agreeable.

From their perspective, they have not really lost an argument as much as maintained a congenial relationship with another person.

Prosocial behavior

A central feature of agreeableness is its positive association with altruism and helping behavior. Across situations, people who are high in agreeableness are more likely to report an interest and involvement with helping others. Experiments have shown that whereas most people are likely to help their own kin, or when empathy has been aroused, agreeable
people are likely to help even when these conditions are not present. In other words, agreeable people appear to be "traited for helping" and do not need any other motivations.

While agreeable individuals are habitually likely to help others, disagreeable people may be more likely to harm them. Researchers have found that low levels of agreeableness are associated with hostile thoughts and aggression in adolescents, as well as poor social adjustment. People low in agreeableness are also more likely to be prejudiced against stigmatized groups such as the overweight.

When mental illness is present, low agreeableness may be associated with narcissistic and anti-social tendencies. In theory, individuals who are extremely high in agreeableness are at risk for problems of dependency, but empirical studies show that many more problems are associated with low agreeableness.

**Geography**

In the United States, midwesterners and southerners tend to have higher average scores on agreeableness than people living in other regions. According to researchers, the top ten most agreeable states are North Dakota, Minnesota, Mississippi, Utah, Wisconsin, Tennessee, North Carolina, Georgia, Oklahoma, and Nebraska. These findings are consistent with well known expressions in these states, such as "southern hospitality" and "Minnesota nice." Because these states are generally less urbanized than the east and west coasts, people may be more likely to live in small communities and know their neighbors, and consequently, more willing to care about them and help them out.

**Neuroticism**

Neuroticism is a fundamental personality trait in the study of psychology. It is an enduring tendency to experience negative emotional states. Individuals who score high on neuroticism are more likely than the average to experience such feelings as anxiety, anger, guilt, and depressed mood. They respond more poorly to environmental stress, and are more likely to interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult. They are often self-conscious and shy, and they may have trouble controlling urges and delaying gratification. Neuroticism is associated with low emotional intelligence, which involves emotional regulation, motivation, and interpersonal skills. It is also a risk factor for "internalizing" mental disorders such as phobia, depression, panic disorder, and other anxiety disorders (traditionally called neuroses).

**Emotional stability**

On the opposite end of the spectrum, individuals who score low in neuroticism are more emotionally stable and less reactive to stress. They tend to be calm, even tempered, and less likely to feel tense or rattled. Although they are low in negative emotion, they are not necessarily high on positive emotion. Being high on positive emotion is an element of the independent trait of extraversion. Neurotic extraverts, for example, would experience high
levels of both positive and negative emotional states, a kind of "emotional roller coaster". Individuals who score low on neuroticism (particularly those who are also high on extraversion) generally report more happiness and satisfaction with their lives.

**Measurement**

Like other personality traits, neuroticism is typically viewed as a continuous dimension, rather than as a distinct type of person. People vary in their level of neuroticism, with a small minority of individuals scoring extremely high or extremely low on the dimension. Because most people cluster around the average, neuroticism test scores approximate a normal distribution, given a large enough sample of people. Neuroticism is one of the most studied personality traits in psychology, and this has resulted in a wealth of data and statistical analysis. It is measured on the EPQ, the NEO PI-R, and other personality inventories.

Neuroticism has also been studied from the perspective of Gray's biopsychological theory of personality, using a scale that measures personality along two dimensions: the Behavioural Inhibition System (BIS) and the Behavioural Activation System (BAS). The BIS is thought to be related to sensitivity to punishment as well as avoidance motivation, while the BAS is thought to be related to sensitivity to reward as well as approach motivation. Neuroticism has been found to be positively correlated with the BIS scale, and negatively correlated with the BAS scale.

**Physiology**

Neuroticism appears to be related to physiological differences in the brain. Hans Eysenck theorized that neuroticism is a function of activity in the limbic system, and his research suggests that people who score highly on measures of neuroticism have a more reactive sympathetic nervous system, and are more sensitive to environmental stimulation. Behavioral genetics researchers have found that a significant portion of the variability on measures of neuroticism can be attributed to genetic factors.

A study with positron emission tomography has found that healthy subjects that score high on the NEO PI-R neuroticism dimension tend to have high altanserin binding in the frontolimbic region of the brain — an indication that these subjects tend to have more of the 5-HT2A receptor in that location. Another study has found that healthy subjects with a high neuroticism score tend to have higher DASB binding in the thalamus; DASB is a ligand that binds to the serotonin transporter protein.

Another neuroimaging study using magnetic resonance imaging to measure brain volume found that the brain volume was negatively correlated to NEO PI-R neuroticism when correcting for possible effects of intracranial volume, sex, and age.

Other studies have associated neuroticism with genetic variations, e.g., with 5-HTTLPR — a polymorphism in the serotonin transporter gene. However, not all studies find such an association. A genome-wide association study (GWA study) has associated single-
nucleotide polymorphisms in the MDGA2 gene with neuroticism, however the effect sizes were small. Another GWA study gave some evidence that the rs362584 polymorphism in the SNAP25 gene was associated with neuroticism.

A 2009 study has found that higher neuroticism is associated with higher decreased brain size with increasing age.

**Mental-noise hypothesis**

Studies have found that the mean reaction times (RTs) will not differ between individuals high in neuroticism and those low in neuroticism, but that there is considerably more trial-to-trial variability in performance reflected in RT standard deviations. In other words, on some trials neurotic individuals are faster than average, and on others they are slower than average. It has been suggested that this variability reflects noise in the individual’s information processing systems or instability of basic cognitive operations (such as regulation processes), and further that this noise originates from two sources: mental preoccupations and reactivity processes.

Flehmig et al. (2007) studied mental noise in terms of everyday behaviours using the Cognitive Failures Questionnaire which is a self-report measure of the frequency of slips and lapses of attention. A slip is an error by commission, and a lapse is an error by omission. This scale was correlated with two well-known measures of neuroticism (the BIS/BAS scale and the Eysenck Personality Questionnaire). Results indicated that the CFQ-UA subscale was most strongly correlated with neuroticism (r = .40) and explained the most variance (16%) compared to overall CFQ scores which only explained 7%. The authors interpret these findings as suggesting that mental noise is "highly specific in nature" as it is related most strongly to attention slips triggered endogenously by associative memory. In other words, this may suggest that mental noise is mostly task-irrelevant cognitions such as worries and preoccupations.

**Geography**

Neuroticism, along with other personality traits, has been mapped across states in the USA. People in eastern states such as New York, New Jersey, West Virginia, and Mississippi tend to score high on neuroticism, whereas people in many western states, such as Utah, Colorado, South Dakota, Oregon, and Arizona score lower on average. People in states that are higher in neuroticism also tend to have higher rates of heart disease and lower life expectancy.
**Personality test**

A personality test aims to describe aspects of a person's character that remain stable throughout that person's lifetime, the individual's character pattern of behavior, thoughts, and feelings. An early model of personality was posited by Greek philosopher/physician Hippocrates. The 20th century heralded a new interest in defining and identifying separate personality types, in close correlation with the emergence of the field of psychology. As such, several distinct tests emerged; some attempt to identify specific characteristics, while others attempt to identify personality as a whole.

**Overview**

There are many different types of personality tests. Common personality tests consist of a large number of items, in which respondents must rate the applicability of each item to themselves. Projective tests, such as the TAT and Ink Blots are another form of personality test which attempt to assess personality.

**Scoring**

Personality tests can be scored using a dimensional (normative) or a typological (ipsative) approach. Dimensional approaches such as the Big 5 describe personality as a set of continuous dimensions on which individuals differ.

Typological approaches such as the Myers-Briggs Type Indicator (r) describe opposing categories of functioning where individuals differ. Normative responses for each category can be graphed as bell curves (normal curves), implying that some aspects of personality are better than others I psative test responses offer two equally "good" responses between which an individual must choose. Such responses (e.g., on the MBTI) would result in bi-modal graphs for each category, rather than bell curves.

Personality tests such as the Strength Deployment Inventory (r), which assesses motivation, or purpose, of behavior, rather than the behavior itself, combine a dimensional and typological approach as described here. Three continuums of motivation are combined to yield 7 distinct types.

Many, but by no means all, psychological researchers believe that the dimensional approach is more accurate, although as judged by the popularity of the Myers-Briggs tool, typological approaches have substantial appeal as a self-development tool.

Personality tests, especially 5-Factor (Big Five personality traits), such as the NEO PIR, are extremely powerful. For a current bibliography see the NEO PIR Bibliography (Costa and McCrae, PAR, 2003). Just one article "The five-factor model of personality in the workplace" (Neubert) shows how the personality factors predict job satisfaction and performance.
Emotive tests could in theory become prey to unreliable results due to people striving to pick the answer they feel the best fitting of an ideal character and therefore not their true response. In practice, however, most people do not significantly distort. There may be several reasons for this, not the least of which is knowing what is “ideal.” What is the ideal response set for an aircraft salesperson? Unless one knows how to sell aircraft it is unlikely they could dissemble appropriately.

Norms

The meaning of personality test scores are difficult to interpret in a direct sense. For this reason substantial effort is made by producers of personality tests to produce norms to provide a comparative basis for interpreting a respondent’s test scores. Common formats for these norms include percentile ranks, z scores, sten scores, and other forms of standardised scores.

Test development

A substantial amount of research and thinking has gone into the topic of personality test development. Development of personality tests tends to be an iterative process whereby a test is progressively refined. Test development can proceed on theoretical or statistical grounds. Theoretical strategies can involve taking psychological or other theory to define the content domain and then developing test items that should in principle measure the domain of interest. This can then be accompanied by assessment by experts of the developed items to the defined construct. Statistical strategies are varied. Common strategies involve the use of exploratory factor analysis and confirmatory factor analysis to verify that items that are proposed to group together into factors actually do group together empirically. Reliability analysis and Item Response Theory are additional complimentary approaches.

Test evaluation

There are several criteria for evaluating a personality test. Fundamentally, a personality test is expected to demonstrate reliability and validity.

Criticism and controversy

Biased test taker interpretation

One problem of a personality test is that the users of the test could only find it accurate because of the subjective validation involved. This is where the person only acknowledges the information that applies to him/her.

Application to non-clinical samples

Critics have raised issues about the ethics of administering personality tests, especially for non-clinical uses. By the 1960s, tests like the MMPI were being given by companies to
employees and applicants as often as to psychiatric patients. Sociologist William H. Whyte was among those who saw the tests as helping to create and perpetuate the oppressive groupthink of "The Organization Man" mid-20th century corporate capitalistic mentality.

This is still relevant to today’s job market, where use of Unicru personality tests has become unpopular enough to create a demand for software applications to automate the process of filling them out.

**Personality versus social factors**

In the 60s and 70s some psychologists dismissed the whole idea of personality, considering much behaviour to be content specific. This idea was supported by the fact that personality often does not predict behaviour in specific contexts. However, more extensive research has shown than when behaviour is aggregated across contexts, that personality can be a modest to good predictor of behaviour. Almost all psychologists now acknowledge that both social and individual difference factors (i.e., personality) influence behaviour. The debate is currently more around the relative importance of each of these factors and how these factors interact.

**Respondent faking**

One problem with self-report measures of personality is that respondents are often able to distort their responses. This is particularly problematic in employment contexts and other contexts where important decisions are being made and there is an incentive to present oneself in a favourable manner. Work in experimental settings (e.g., Viswesvaran & Ones, 1999; Martin, Bowen & Hunt, 2002) has clearly shown that when student samples have been asked to deliberately fake on a personality test, they clearly demonstrated that they are capable of doing so.

Several strategies have been adopted for reducing respondent faking. One strategy involves providing a warning on the test that methods exist for detecting faking and that detection will result in negative consequences for the respondent (e.g., not being considered for the job). Forced choice item formats (ipsative testing) have been adopted which require respondents to choose between alternatives of equal social desirability. Social desirability and lie scales are often included which detect certain patterns of responses, although these are often confounded by true variability in social desirability. More recently, Item Response Theory approaches have been adopted with some success in identifying item response profiles that flag fakers. Other researchers are looking at the timing of responses on electronically administered tests to assess faking. While people can fake in practice they seldom do so to any significant level. To successfully fake means knowing what the ideal answer would be. Even with something as simple as assertiveness people who are unassertive and try to appear assertive often endorse the wrong items. This is because unassertive people confuse assertion with aggression, anger, oppositional behavior, etc.

**Psychological Research**
Personality testing is frequently used in psychological research to test various theories of personality.

Research published by David Dunning of Cornell University, Chip Heath of Stanford University and Jerry M. Suls of the University of Iowa reveals that observers who are not involved in any type of relationship with an individual are better judges of the individual’s relationships and abilities. These workers have studied a large body of investigations into self-evaluation, indicating that individuals may have flawed views about themselves and their social relationships, sometimes leading to decisions that can impact negatively on other persons’ lives and/or their own.

**Additional applications**

A study by American Management Association reveals that 39 percent of companies surveyed use personality testing as part of their hiring process. However, ipsative personality tests are often misused in recruitment and selection, where they are mistakenly treated as if they were normative measures. More people are using personality testing to evaluate their business partners, their dates and their spouses. Salespeople are using personality testing to better understand the needs of their customers and to gain a competitive edge in the closing of deals. College students have started to use personality testing to evaluate their roommates. Lawyers are beginning to use personality testing for criminal behavior analysis, litigation profiling, witness examination and jury selection.

**Dangers of Such Practices**

It is easy for personality test participants to become complacent about their own personal uniqueness and instead become dependent on the description associated with them. This can be potentially dangerous with persons who are already suffering from a form of identity disorder or may be a catalyst to instigate particular behaviors in a person who was previously believed to be of sound mental health. The severity of the damage that individuals can sustain to their personal identity was made clear during the case Wilson v Johnson&Johnson in which the plaintiff (Wilson) sued his former employer (Johnson&Johnson) for irreparable damages that resulted from the over abundance of personality tests being administered in the workplace. Wilson argued that repeated questioning and scrutiny of his personality was a cause of strain and eventually breakdown. In this historic case, Wilson was awarded $4.7 million after jurors agreed that excessive testing caused strain and led to unnecessary scrutiny resulting in personal grief. Similar cases have been tried since and won, but none with such magnitude as this first monumental case that won mental health rights for employees.

**Examples of personality tests**

- The first modern personality test was the Woodworth Personal data sheet, which was first used in 1919. It was designed to help the United States Army screen out recruits who might be susceptible to shell shock.
- The **Rorschach inkblot test** was introduced in 1921 as a way to determine personality by the interpretation of abstract inkblots.

- The **Thematic Apperception Test** was commissioned by the Office of Strategic Services (O.S.S.) in the 1930s to identify personalities that might be susceptible to being turned by enemy intelligence.

- The **Minnesota Multiphasic Personality Inventory** was published in 1942 as a way to aid in assessing psychopathology in a clinical setting.

- The **Myers-Briggs Type Indicator** is a 16-type indicator based on Carl Jung’s Psychological Types, developed during World War II by Isabel Myers and Katherine Briggs.

- The **Keirsey Temperament Sorter** developed by David Keirsey is influenced by Isabel Myers sixteen types and Ernst Kretschmer's four types.

- The **16PF Questionnaire (16PF)** was developed by Raymond Cattell and his colleagues in the 1940s and 1950s in a search to try to discover the basic traits of human personality using scientific methodology. The test was first published in 1949, and is now in its 5th edition, published in 1994. It is used in a wide variety of settings for individual and marital counseling, career counseling and employee development, in educational settings, and for basic research.

- The **Five Factor Personality Inventory** (FFPI-C) was developed to measure personality traits in children based upon the Five Factor Model (Big Five personality traits).

- The **EQSQ Test** developed by Professor Simon Baron-Cohen, Sally Wheelwright, and their team at the University of Cambridge, England, centers on the Empathizing-Systemizing theory of the male versus the female brain types.

- The **Personal Style Indicator (PSI)** classifies four aspects of innate behavior by testing a person's preferences in word associations.

- The **Strength Deployment Inventory**, developed by Elias Porter, Ph.D. in 1971 and is based on his theory of Relationship Awareness. Porter was the first known psychometrician to use colors (Red, Green and Blue) as shortcuts to communicate the results of a personality test.

- The **ProScan Survey** is an instrument designed by Professional DynaMetric Programs, Inc. (PDP) to measure the major aspects of self-perception, including an individual’s basic behavior, reaction to environment, and predictable behavior. It was originally developed beginning in 1976 by Dr. Samuel R. Houston, Dr. Dudley Solomon, and Bruce M. Hubby.
- **The Newcastle Personality Assessor (NPA)**, created by Daniel Nettle, is a short questionnaire designed to quantify personality on five dimensions: Extraversion, Neuroticism, Conscientious, Agreeableness, and Openness.

- **The DISC assessment** is based on the research of William Moulton Marston and later work by John Grier, and identifies four personality types: Dominance; Influence; Steadiness and Conscientiousness. It is used widely in Fortune 500 companies, for-profit and non-profit organizations.

Other personality tests include the NEO PI-R, Forté Profile, Millon Clinical Multiaxial Inventory, Eysenck Personality Questionnaire, Swedish Universities Scales of Personality, and Enneagram of Personality.

### Projective test

In psychology, a projective test is a personality test designed to let a person respond to ambiguous stimuli, presumably revealing hidden emotions and internal conflicts. This is different from an "objective test" in which responses are analyzed according to a universal standard (for example, a multiple choice exam). The responses to projective tests are content analyzed for meaning rather than being based on presuppositions about meaning, as is the case with objective tests. Some criticisms of projective tests include that they rely heavily on clinical judgement, lack reliability and validity and many have no standardized criteria to which results may be compared, however this is not always the case. These tests are used frequently, though the scientific evidence is sometimes debated. There have been many empirical studies based on projective tests (including the use of standardized norms and samples), particularly more established tests. The criticism of lack of scientific evidence to support them and their continued popularity has been referred to as the "projective paradox". Projective tests have their origins in psychoanalytic psychology, which argues that humans have conscious and unconscious attitudes and motivations that are beyond or hidden from conscious awareness.

The terms "objective test" and "projective test" have recently come under criticism in the Journal of Personality Assessment. The more descriptive "rating scale or self-report measures" and "free response measures" are suggested, rather than the terms "objective tests" and "projective tests," respectively.

### Theory

The general theoretical position behind projective tests is that whenever a specific question is asked, the response will be consciously-formulated and socially determined. These responses do not reflect the respondent’s unconscious or implicit attitudes or motivations. The respondent’s deep-seated motivations may not be consciously recognized by the respondent or the respondent may not be able to verbally express them in the form demanded by the questioner. Advocates of projective tests stress that the ambiguity of the stimuli presented within the tests allow subjects to express thoughts that originate on a
deeper level than tapped by explicit questions. Projective tests lost some of their popularity during the 1980s and 1990s in part because of the overall loss of popularity of the psychoanalytic method and theories. Despite this, they are still used quite frequently.

**Common variants**

**Rorschach**

The best known and most frequently used projective test is the Rorschach inkblot test, in which a subject is shown a series of ten irregular but symmetrical inkblots, and asked to explain what they see. The subject’s responses are then analyzed in various ways, noting not only what was said, but the time taken to respond, which aspect of the drawing was focused on, and how single responses compared to other responses for the same drawing. For example, if someone consistently sees the images as threatening and frightening, the tester might infer that the subject may suffer from paranoia.

**Thematic apperception test**

Another popular projective test is the Thematic Apperception Test (TAT) in which an individual views ambiguous scenes of people, and is asked to describe various aspects of the scene; for example, the subject may be asked to describe what led up to this scene, the emotions of the characters, and what might happen afterwards. The examiner then evaluates these descriptions, attempting to discover the conflicts, motivations and attitudes of the respondent. In the answers, the respondent "projects" their unconscious attitudes and motivations into the picture, which is why these are referred to as "projective tests."

**Draw-A-Person test**

The Draw-A-Person test requires the subject to draw a person. The results are based on a psychodynamic interpretation of the details of the drawing, such as the size, shape and complexity of the facial features, clothing and background of the figure. As with other projective tests, the approach has very little demonstrated validity and there is evidence that therapists may attribute pathology to individuals who are merely poor artists. A similar class of techniques is kinetic family drawing.

**Sentence completion test**

Sentence completion tests require the subject complete sentence "stems" with their own words. The subject’s response is considered to be a projection of their conscious and/or unconscious attitudes, personality characteristics, motivations, and beliefs.

**Uses in marketing**

Projective techniques, including TATs, are used in qualitative marketing research, for example to help identify potential associations between brand images and the emotions they may provoke. In advertising, projective tests are used to evaluate responses to
advertisements. The tests have also been used in management to assess achievement motivation and other drives, in sociology to assess the adoption of innovations, and in anthropology to study cultural meaning. The application of responses is different in these disciplines than in psychology, because the responses of multiple respondents are grouped together for analysis by the organisation commissioning the research, rather than interpreting the meaning of the responses given by a single subject.

Rorschach test

The Rorschach test (also known as the Rorschach inkblot test, the Rorschach technique, or simply the inkblot test) is a psychological test in which subjects' perceptions of inkblots are recorded and then analyzed using psychological interpretation, complex scientifically derived algorithms, or both. Some psychologists use this test to examine a person's personality characteristics and emotional functioning. It has been employed to detect underlying thought disorder, especially in cases where patients are reluctant to describe their thinking processes openly. The test is named after its creator, Swiss psychologist Hermann Rorschach.

The first of the ten cards in the Rorschach test, with the occurrence of the most statistically frequent details indicated. The images themselves are only one component of the test, whose focus is the analysis of the perception of the images.

In the 1960s, the Rorschach was the most widely used projective test. In a national survey in the U.S., the Rorschach was ranked eighth among psychological tests used in outpatient mental health facilities. It is the second most widely used test by members of the Society for Personality Assessment, and it is requested by psychiatrists in 25% of forensic assessment cases, usually in a battery of tests that often include the MMPI-2 and the MCMI-III. In surveys, the use of Rorschach ranges from a low of 20% by correctional psychologists to a high of 80% by clinical psychologists engaged in assessment services, and 80% of psychology graduate programs surveyed teach it.
Although the Exner Scoring System (developed since the 1960s) claims to have addressed and often refuted many criticisms of the original testing system with an extensive body of research, some researchers continue to raise questions. The areas of dispute include the objectivity of testers, inter-rater reliability, the verifiability and general validity of the test, bias of the test’s pathology scales towards greater numbers of responses, the limited number of psychological conditions which it accurately diagnoses, the inability to replicate the test’s norms, its use in court-ordered evaluations, and the proliferation of the ten inkblot images, potentially invalidating the test for those who have been exposed to them.

**History**

Hermann Rorschach created the Rorschach inkblot test in 1921.

Using interpretation of "ambiguous designs" to assess an individual’s personality is an idea that goes back to Leonardo da Vinci and Botticelli. Interpretation of inkblots was central to a game from the late 19th century. Rorschach’s, however, was the first systematic approach of this kind.

It has been suggested that Rorschach’s use of inkblots may have been inspired by German doctor Justinus Kerner who, in 1857, had published a popular book of poems, each of which was inspired by an accidental inkblot. French psychologist Alfred Binet had also experimented with inkblots as a creativity test, and, after the turn of the century, psychological experiments where inkblots were utilized multiplied, with aims such as studying imagination and consciousness.

After studying 300 mental patients and 100 control subjects, in 1921 Rorschach wrote his book Psychodagnostik, which was to form the basis of the inkblot test (after experimenting with several hundred inkblots, he selected a set of ten for their diagnostic value), but he died the following year. Although he had served as Vice President of the
Swiss Psychoanalytic Society, Rorschach had difficulty in publishing the book and it attracted little attention when it first appeared.

In 1927, the newly-founded Hans Huber publishing house purchased Rorschach’s book Psychodiagnostics from the inventory of Ernst Bircher. Huber has remained the publisher of the test and related book, with Rorschach a registered trademark of Swiss publisher Verlag Hans Huber, Hogrefe AG. The work has been described as "a densely written piece couched in dry, scientific terminology".

After Rorschach’s death, the original test scoring system was improved by Samuel Beck, Bruno Klopfer and others. John E. Exner summarized some of these later developments in the comprehensive system, at the same time trying to make the scoring more statistically rigorous. Some systems are based on the psychoanalytic concept of object relations. The Exner system remains very popular in the United States, while in Europe other methods sometimes dominate, such as that described in the textbook by Evald Bohm, which is closer to the original Rorschach system and rooted more deeply in the original psychoanalysis principles.

**Method**

The tester and subject typically sit next to each other at a table, with the tester slightly behind the subject. This is to facilitate a "relaxed but controlled atmosphere". There are ten official inkblots, each printed on a separate white card, approximately 18x24 cm in size. Each of the blots has near perfect bilateral symmetry. Five inkblots are of black ink, two are of black and red ink and three are multicolored, on a white background. After the test subject has seen and responded to all of the inkblots (free association phase), the tester then presents them again one at a time in a set sequence for the subject to study: the subject is asked to note where he sees what he originally saw and what makes it look like that (inquiry phase). The subject is usually asked to hold the cards and may rotate them. Whether the cards are rotated, and other related factors such as whether permission to rotate them is asked, may expose personality traits and normally contributes to the assessment. As the subject is examining the inkblots, the psychologist writes down everything the subject says or does, no matter how trivial. Analysis of responses is recorded by the test administrator using a tabulation and scoring sheet and, if required, a separate location chart.

The general goal of the test is to provide data about cognition and personality variables such as motivations, response tendencies, cognitive operations, affectivity, and personal/interpersonal perceptions. The underlying assumption is that an individual will class external stimuli based on person-specific perceptual sets, and including needs, base motives, conflicts, and that this clustering process is representative of the process used in real-life situations. Methods of interpretation differ. Rorschach scoring systems have been described as a system of pegs on which to hang one’s knowledge of personality. The most widely used method in the United States is based on the work of Exner.
Administration of the test to a group of subjects, by means of projected images, has also occasionally been performed, but mainly for research rather than diagnostic purposes.

Test administration is not to be confused with test interpretation:

"The interpretation of a Rorschach record is a complex process. It requires a wealth of knowledge concerning personality dynamics generally as well as considerable experience with the Rorschach method specifically. Proficiency as a Rorschach administrator can be gained within a few months. However, even those who are able and qualified to become Rorschach interpreters usually remain in a "learning stage" for a number of years."

Features or categories

The interpretation of the Rorschach test is not based primarily on the contents of the response, i.e., what the individual sees in the inkblot (the content). In fact, the contents of the response are only a comparatively small portion of a broader cluster of variables that are used to interpret the Rorschach data: for instance, information is provided by the time taken before providing a response for a card can be significant (taking a long time can indicate "shock" on the card). as well as by any comments the subject may make in addition to providing a direct response.

In particular, information about determinants (the aspects of the inkblots that triggered the response, such as form and color) and location (which details of the inkblots triggered the response) is often considered more important than content, although there is contrasting evidence. "Popularity" and "originality" of responses can also be considered as basic dimensions in the analysis.

Content

Content is classified in terms of "human", "nature", "animal", "abstract", etc., as well as for statistical popularity (or, conversely, originality).

More than any other feature in the test, content response can be controlled consciously by the subject, and may be elicited by very disparate factors, which makes it difficult to use content alone to draw any conclusions about the subject's personality; with certain individuals, content responses may potentially be interpreted directly, and some information can at times be obtained by analyzing thematic trends in the whole set of content responses (which is only feasible when several responses are available), but in general content cannot be analyzed outside of the context of the entire test record.

Location

The basis for the response is usually the whole inkblot, a detail (either a commonly or an uncommonly selected one), or the negative space around or within the inkblot.
Determinants

Systems for Rorschach scoring generally include a concept of "determinants": these are the factors that contribute to establish the similarity between the inkblot and the subject's content response about it, and they can represent certain basic experiential-perceptual attitudes, showing aspects of the way a subject perceives the world. Rorschach's original work used only form, color and movement; currently, another major determinant considered is shading, which was inadvertently introduced by poor printing of the inkblots (which originally featured uniform saturation), and subsequently recognized as significant by Rorschach himself.

Form is the most common determinant, and is related to intellectual processes; color responses often provide direct insight into emotional life. Shading and movement have been considered more ambiguously, both in definition and interpretation: Rorschach originally disregarded shading (which was originally not even present on the cards, being a result of the print process), and he considered movement as only actual experiencing of motion, while others have widened the scope of this determinant, taking it to mean that the subject sees something "going on".

More than one determinant can contribute to the formation of the subject's percept, and fusion of two determinants is taken into account, while also assessing which of the two constituted the primary contributor (e.g. "form-color" implies a more refined control of impulse than "color-form"). It is, indeed, from the relation and balance among determinants that personality can be most readily inferred.

Exner scoring system

The Exner scoring system, also known as the Rorschach Comprehensive System (RCS), is the standard method for interpreting the Rorschach test. It was developed in the 1960s by Dr. John E. Exner, as a more rigorous system of analysis. It has been extensively validated and shows high inter-rater reliability. In 1969, Exner published The Rorschach Systems, a concise description of what would be later called "the Exner system". He later published a study in multiple volumes called The Rorschach: A Comprehensive system, the most accepted full description of his system.

Creation of the new system was prompted by the realization that at least five related, but ultimately different methods were in common use at the time, with a sizeable minority of examiners not employing any recognized method at all, basing instead their judgment on subjective assessment, or arbitrarily mixing characteristics of the various standardized systems.

The key components of the Exner system are the clusterization of Rorschach variables and a sequential search strategy to determine the order in which to analyze them, framed in the context of standardized administration, objective, reliable coding and a representative normative database. The system places a lot of emphasis on a cognitive triad of information...
processing, related to how the subject processes input data, cognitive mediation, referring to the way information is transformed and identified, and ideation.

In the system, responses are scored with reference to their level of vagueness or synthesis of multiple images in the blot, the location of the response, which of a variety of determinants is used to produce the response (i.e., what makes the inkblot look like what it is said to resemble), the form quality of the response (to what extent a response is faithful to how the actual inkblot looks), the contents of the response (what the respondent actually sees in the blot), the degree of mental organizing activity that is involved in producing the response, and any illogical, incongruous, or incoherent aspects of responses. It has been reported that popular responses on the first card include bat, badge and coat of arms.

Using the scores for these categories, the examiner then performs a series of calculations producing a structural summary of the test data. The results of the structural summary are interpreted using existing research data on personality characteristics that have been demonstrated to be associated with different kinds of responses.

With the Rorschach plates (the ten inkblots), the area of each blot which is distinguished by the client is noted and coded – typically as "commonly selected" or "uncommonly selected". There were many different methods for coding the areas of the blots. Exner settled upon the area coding system promoted by S. J. Beck (1944 and 1961). This system was in turn based upon Klopfer’s (1942) work.

As pertains to response form, a concept of "form quality" was present from the earliest of Rorschach’s works, as a subjective judgment of how well the form of the subject’s response matched the inkblots (Rorschach would give a higher form score to more "original" yet good form responses), and this concept was followed by other methods, especially in Europe; in contrast, the Exner system solely defines "good form" as a matter of word occurrence frequency, reducing it to a measure of the subject's distance to the population average.

Cultural differences

Comparing North American Exner normative data with data from European and South American subjects showed marked differences in some features, some of which impact important variables, while others (such as the average number of responses) coincide. For instance, texture response is typically zero in European subjects (if interpreted as a need for closeness, in accordance with the system, a European would seem to express it only when it reaches the level of a craving for closeness), and there are fewer "good form" responses, to the point where schizophrenia may be suspected if data were correlated to the North American norms. Form is also often the only determinant expressed by European subjects; while color is less frequent than in American subjects, color-form responses are comparatively frequent in opposition to form-color responses; since the latter tend to be interpreted as indicators of a defensive attitude in processing affect, this difference could stem from a higher value attributed to spontaneous expression of emotions.
The differences in form quality are attributable to purely cultural aspects: different cultures will exhibit different "common" objects (French subjects often identify a chameleon in card VIII, which is normally classed as an "unusual" response, as opposed to other animals like cats and dogs; in Scandinavia, "Christmas elves" (nisser) is a popular response for card II, and "musical instrument" on card VI is popular for Japanese people), and different languages will exhibit semantic differences in naming the same object (the figure of card IV is often called a troll by Scandinavians and an ogre by French people). Many of Exner's "popular" responses (those given by at least one third of the North American sample used) seem to be universally popular, as shown by samples in Europe, Japan and South America, while specifically card IX's "human" response, the crab or spider in card X and one of either the butterfly or the bat in card I appear to be characteristic of North America.

Form quality, popular content responses and locations are the only coded variables in the Exner systems that are based on frequency of occurrence, and thus immediately subject to cultural influences; therefore, cultural-dependent interpretation of test data may not necessarily need to extend beyond these components.

The cited language differences mean that it's imperative for the test to be administered in the subject's native language or a very well mastered second language, and, conversely, the examiner should master the language used in the test. Test responses should also not be translated into another language prior to analysis except possibly by a clinician mastering both languages. For example, a bow tie is a frequent response for the center detail of card III, but since the equivalent term in French translates to "butterfly tie", an examiner not appreciating this language nuance may code the response differently from what is expected.

**Neurology**

Research using card III have found that “unique responses” are found in people with larger amygdalas. The researchers note, "Since previous reports have indicated that unique responses were observed at higher frequency in the artistic population than in the non-artistic normal population, this positive correlation suggests that amygdalar enlargement in the normal population might be related to creative mental activity."

**The ten inkblots**

Below are the ten inkblots of the Rorschach test printed in Rorschach's Rorschach Test – Psychodiagnostic Plates, together with the most frequent responses for either the whole image or the most prominent details according to various authors.
Card Popular responses Comments

Beck: bat, butterfly, moth
Piotrowski: bat (53%), butterfly (29%)
Dana (France): butterfly (39%)

When seeing card I, subjects often inquire on how they should proceed, and questions on what they are allowed to do with the card (e.g. turning it) are not very significant. Being the first card, it can provide clues about how subjects tackle a new and stressful task. It is not, however, a card that is usually difficult for the subject to handle, having readily available popular responses.

Beck: two humans
Piotrowski: four-legged animal (34%, gray parts)
Dana (France): animal: dog, elephant, bear (50%, gray)
The red details of card II are often seen as blood, and are the most distinctive features. Responses to them can provide indications about how a subject is likely to manage feelings of anger or physical harm. This card can induce a variety of sexual responses.

Card III is typically perceived to contain two humans involved in some interaction, and may provide information about how the subject relates with other people (specifically, response latency may reveal struggling social interactions).
Card IV is notable for its dark color and its shading (posing difficulties for depressed subjects), and is generally perceived as a big and sometimes threatening figure; compounded with the common impression of the subject being in an inferior position ("looking up") to it, this serves to elicit a sense of authority. The human or animal content seen in the card is almost invariably classified as male rather than female, and the qualities expressed by the subject may indicate attitudes toward men and authority. Because of this Card IV is often called "The Father Card".

Card V is an easily elaborated card that is not usually perceived as threatening, and typically instigates a "change of pace" in the test, after the previous more challenging cards. Containing few features that generate concerns or complicate the elaboration, it is the easiest blot to generate a good quality response about.
Texture is the dominant characteristic of card VI, which often elicits association related to interpersonal closeness; it is specifically a "sex card", its likely sexual percepts being reported more frequently than in any other card, even though other cards have a greater variety of commonly seen sexual contents.

Card VII can be associated with femininity (the human figures commonly seeing in it being described as women or children), and function as a "mother card", where difficulties in
responding may be related to concerns with the female figures in the subject's life. The center detail is relatively often (though not popularly) identified as a vagina, which make this card also relate to feminine sexuality in particular.

Beck: animal: not cat or dog (pink)
Piotrowski: four-legged animal (94%, pink)
Dana (France): four-legged animal (93%, pink)

People often express relief about card VIII, which lets them relax and respond effectively. Similar to card V, it represents a "change of pace"; however, the card introduces new elaboration difficulties, being complex and the first multi-colored card in the set. Therefore, people who find processing complex situations or emotional stimuli distressing or difficult may be uncomfortable with this card.
Characteristic of card IX is indistinct form and diffuse, muted chromatic features, creating a general vagueness. There is only one popular response, and it is the least frequent of all cards. Having difficulty with processing this card may indicate trouble dealing with unstructured data, but aside from this there are few particular "pulls" typical of this card.
Card X is structurally similar to card VIII, but its uncertainty and complexity are reminiscent of card IX: people who find it difficult to deal with many concurrent stimuli may not particularly like this otherwise pleasant card. Being the last card, it may provide an opportunity for the subject to "sign out" by indicating what they feel their situation is like, or what they desire to know.

Prevalence

Globe icon.

United States

The Rorschach test is used almost exclusively by psychologists. In a survey done in the year 2000, 20% of correctional psychologists used the Rorschach while 80% used the MMPI. Forensic psychologists use the Rorschach 36% of the time. In custody cases, 23% of psychologists use the Rorschach to examine a child. Another survey found that 124 out of 161 (77%) of clinical psychologists engaging in assessment services utilize the Rorschach, and 80% of psychology graduate programs teach its use. Another study found that its use by clinical psychologists was only 43%, while it was used less than 24% of the time by school psychologists.

Controversy

Some skeptics consider the Rorschach inkblot test pseudoscience, as several studies suggested that conclusions reached by test administrators since the 1950s were akin to cold reading. In the 1959 edition of Mental Measurement Yearbook, Lee Cronbach (former President of the Psychometric Society and American Psychological Association) is quoted in a review: "The test has repeatedly failed as a prediction of practical criteria. There is nothing in the literature to encourage reliance on Rorschach interpretations." In addition, major reviewer Raymond J. McCall writes (p. 154): "Though tens of thousands of Rorschach tests have been administered by hundreds of trained professionals since that time (of a previous review), and while many relationships to personality dynamics and behavior have been hypothesized, the vast majority of these relationships have never been validated empirically, despite the appearance of more than 2,000 publications about the test." A moratorium on its use was called for in 1999.

A 2003 report by Wood and colleagues had more mixed views: "More than 50 years of research have confirmed Lee J. Cronbach's (1970) final verdict: that some Rorschach scores, though falling woefully short of the claims made by proponents, nevertheless possess "validity greater than chance" (p. 636). "Its value as a measure of thought disorder in schizophrenia research is well accepted. It is also used regularly in research on dependency, and, less often, in studies on hostility and anxiety. Furthermore, substantial evidence justifies the use of the Rorschach as a clinical measure of intelligence and thought disorder."
Test materials

The basic premise of the test is that objective meaning can be extracted from responses to blots of ink which are supposedly meaningless. Supporters of the Rorschach inkblot test believe that the subject’s response to an ambiguous and meaningless stimulus can provide insight into their thought processes, but it is not clear how this occurs. Also, recent research shows that the blots are not entirely meaningless, and that a patient typically responds to meaningful as well as ambiguous aspects of the blots. Reber (1985) describes the blots as merely ".. the vehicle for the interaction .." between client and therapist, concluding: ".. the usefulness of the Rorschach will depend upon the sensitivity, empathy and insightfulness of the tester totally independently of the Rorschach itself. An intense dialogue about the wallpaper or the rug would do as well provided that both parties believe."

Illusory and invisible correlations

In the 1960s, research by psychologists Loren and Jean Chapman showed that at least some of the apparent validity of the Rorschach was due to an illusion. At that time, the five signs most often interpreted as diagnostic of homosexuality were 1) buttocks and anus; 2) feminine clothing; 3) male or female sex organs; 4) human figures without male or female features; and 5) human figures with both male and female features. The Chapmans surveyed 32 experienced testers about their use of the Rorschach to diagnose homosexuality. At this time homosexuality was regarded as a psychopathology, and the Rorschach was the most popular projective test. The testers reported that homosexual men had shown the five signs more frequently than heterosexuals. Despite these beliefs, analysis of the results showed that heterosexual men are just as likely to report these signs, so they are totally ineffective for identifying homosexuals. The five signs did, however, match the guesses students made about which imagery would be associated with homosexuality.

The Chapmans investigated the source of the testers’ false confidence. In one experiment, students read through a stack of cards, each with a Rorschach blot, a sign and a pair of "conditions" (which might include homosexuality). The information on the cards was fictional, although subjects were told it came from case studies of real patients. The students reported that the five invalid signs were associated with homosexuality, even though the cards had been constructed so there was no association at all. The Chapmans repeated this experiment with another set of cards, in which the association was negative; the five signs were never reported by homosexuals. The students still reported seeing a strong positive correlation. These experiments showed that the testers’ prejudices could result in them "seeing" non-existent relationships in the data. The Chapmans called this phenomenon "illusory correlation" and it has since been demonstrated in many other contexts.

A related phenomenon called "invisible correlation" applies when people fail to see a strong association between two events because it does not match their expectations. This was also found in clinicians’ interpretations of the Rorschach. Homosexual men are more
likely to see a monster on Card IV or a part-animal, part-human figure in Card V. Almost all of the experienced clinicians in the Chapmans' survey missed these valid signs. The Chapmans ran an experiment with fake Rorschach responses in which these valid signs were always associated with homosexuality. The subjects missed these perfect associations and instead reported that invalid signs, such as buttocks or feminine clothing, were better indicators.

In 1992, the psychologist Stuart Sutherland argued that these artificial experiments are easier than the real-world use of the Rorschach, and hence they probably underestimated the errors that testers were susceptible to. He described the continuing popularity of the Rorschach after the Chapmans' research as a "glaring example of irrationality among psychologists".

**Tester projection**

Some critics argue that the testing psychologist must also project onto the patterns. A possible example sometimes attributed to the psychologist's subjective judgement is that responses are coded (among many other things), for "Form Quality": in essence, whether the subject's response fits with how the blot actually looks. Superficially this might be considered a subjective judgment, depending on how the examiner has internalized the categories involved. But with the Exner system of scoring, much of the subjectivity is eliminated or reduced by use of frequency tables that indicate how often a particular response is given by the population in general. Another example is that the response "bra" was considered a "sex" response by male psychologists, but a "clothing" response by females. In Exner's system, however, such a response is always coded as "clothing" unless there is a clear sexual reference in the response.

Third parties could be used to avoid this problem, but the Rorschach's inter-rater reliability has been questioned. That is, in some studies the scores obtained by two independent scorers do not match with great consistency. This conclusion was challenged in studies using large samples reported in 2002.

**Validity**

When interpreted as a projective test, results are poorly verifiable. The Exner system of scoring (also known as the "Comprehensive System") is meant to address this, and has all but displaced many earlier (and less consistent) scoring systems. It makes heavy use of what factor (shading, color, outline, etc.) of the inkblot leads to each of the tested person's comments. Disagreements about test validity remain: while the Exner proposed a rigorous scoring system, latitude remained in the actual interpretation, and the clinician's write-up of the test record is still partly subjective. Reber (1985) comments "there is essentially no evidence whatsoever that the test has even a shred of validity."

Nevertheless, there is substantial research indicating the utility of the measure for a few scores. Several scores correlate well with general intelligence. Interestingly, one such scale is R, the total number of responses; this reveals the questionable side-effect that more
intelligent people tend to be elevated on many pathology scales, since many scales do not correct for high R: if a subject gives twice as many responses overall, it is more likely that some of these will seem "pathological". Also correlated with intelligence are the scales for Organizational Activity, Complexity, Form Quality, and Human Figure responses. The same source reports that validity has also been shown for detecting such conditions as schizophrenia and other psychotic disorders; thought disorders; and personality disorders (including borderline personality disorder). There is some evidence that the Deviant Verbalizations scale relates to bipolar disorder. The authors conclude that "Otherwise, the Comprehensive System doesn't appear to bear a consistent relationship to psychological disorders or symptoms, personality characteristics, potential for violence, or such health problems as cancer". (Cancer is mentioned because a small minority of Rorschach enthusiasts have claimed the test can predict cancer.)

Reliability

It is also thought that the test's reliability can depend substantially on details of the testing procedure, such as where the tester and subject are seated, any introductory words, verbal and nonverbal responses to subjects' questions or comments, and how responses are recorded. Exner has published detailed instructions, but Wood et al. cites many court cases where these had not been followed. Similarly, the procedures for coding responses are fairly well specified but extremely time-consuming leaving them very subject to the author's style and the publisher to the quality of the instructions (such as was noted with one of Bohm's textbooks in the 1950s) as well as clinic workers (which would include examiners) being encouraged to cut corners.

US Courts have challenged the Rorschach as well. Jones v Apfel (1997) stated (quoting from Attorney's Textbook of Medicine) that Rorschach "results do not meet the requirements of standardization, reliability, or validity of clinical diagnostic tests, and interpretation thus is often controversial". In State ex rel H.H. (1999) where under cross examination Dr. Bogacki stated under oath "many psychologists do not believe much in the validity or effectiveness of the Rorschach test" and US v Battle (2001) ruled that the Rorschach "does not have an objective scoring system."

Population norms

Another controversial aspect of the test is its statistical norms. Exner's system was thought to possess normative scores for various populations. But, beginning in the mid-1990s others began to try to replicate or update these norms and failed. In particular, discrepancies seemed to focus on indices measuring narcissism, disordered thinking, and discomfort in close relationships. Lilenfeld and colleagues, who are critical of the Rorschach, have stated that this proves that the Rorschach tends to "overpathologise normals". Although Rorschach proponents, such as Hibbard, suggest that high rates of pathology detected by the Rorschach accurately reflect increasing psychopathology in society, the Rorschach also identifies half of all test-takers as possessing "distorted thinking", a false positive rate unexplained by current research.
The accusation of "over-pathologising" has also been considered by Meyer et al. (2007). They presented an international collaborative study of 4704 Rorschach protocols, obtained in 21 different samples, across 17 different countries, with only 2% showing significant elevations on the index of perceptual and thinking disorder, 12% elevated on indices of depression and hyper-vigilance and 13% elevated on persistent stress overload—all in line with expected frequencies among nonpatient populations.

Applications

The test is also controversial because of its common use in court-ordered evaluations. This controversy stems, in part, from the limitations of the Rorschach, with no additional data, in making official diagnoses from the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Irving B. Weiner (co-developer with John Exner of the Comprehensive system) has stated that the Rorschach "is a measure of personality functioning, and it provides information concerning aspects of personality structure and dynamics that make people the kind of people they are. Sometimes such information about personality characteristics is helpful in arriving at a differential diagnosis, if the alternative diagnoses being considered have been well conceptualized with respect to specific or defining personality characteristics". In the vast majority of cases, anyway, the Rorschach test wasn't singled out but used as one of several in a battery of tests, and despite the criticism of usage of the Rorschach in the courts, out of 8,000 cases in which forensic psychologists used Rorschach-based testimony, the appropriateness of the instrument was challenged only six times, and the testimony was ruled inadmissible in only one of those cases. One study has found that use of the test in courts has increased by three times in the decade between 1996 and 2005, compared to the previous fifty years. Others however have found that its usage by forensic psychologists has decreased.

Protection of test items and ethics

Psychologists object to the publication of psychological test material out of concerns that a patient's test responses will be influenced ("primed") by previous exposure. The Canadian Psychological Association takes the position that, "Publishing the questions and answers to any psychological test compromises its usefulness" and calls for "keeping psychological tests out of the public domain." The same statement quotes their president as saying, "The CPA's concern is not with the publication of the cards and responses to the Rorschach test per se, for which there is some controversy in the psychological literature and disagreement among experts, but with the larger issue of the publication and dissemination of psychological test content".

However, from a legal standpoint, the Rorschach test images have in fact been in the public domain for many years in most countries, particularly those with a copyright term of up to 70 years post mortem auctoris. They have been in the public domain in Hermann Rorschach’s native Switzerland since at least 1992 (70 years after the author's death, or 50 years after the cut-off date of 1942), according to Swiss copyright law. They are also in the public domain under United States copyright law where all works published before 1923 are considered to be in the public domain.
This means that the Rorschach images may be used by anyone for any purpose. William Poundstone was, perhaps, first to make them public in his 1983 book Big Secrets, where he also described the method of administering the test.

The American Psychological Association (APA) has a code of ethics that supports "freedom of inquiry and expression" and helping "the public in developing informed judgments". It claims that its goals include "the welfare and protection of the individuals and groups with whom psychologists work", and it requires that psychologists "make reasonable efforts to maintain the integrity and security of test materials". The APA has also raised concerns that the dissemination of test materials might impose "very concrete harm to the general public". It has not taken a position on publication of the Rorschach plates but noted "there are a limited number of standardized psychological tests considered appropriate for a given purpose". Exner and others have claimed that the Rorschach test is capable of detecting suicidality. A public statement by the British Psychological Society expresses similar concerns about psychological tests (without mentioning any test by name) and considers the "release of [test] materials to unqualified individuals" to be misuse if it is against the wishes of the test publisher. In his book Ethics in psychology, Koocher (1998) notes that some believe "reprinting copies of the Rorschach plates ... and listing common responses represents a serious unethical act" for psychologists and is indicative of "questionable professional judgment". Other professional associations, such as the Italian Association of Strategic Psychotherapy, recommend that even information about the purpose of the test or any detail of its administration should be kept from the public, even though "cheating" the test is held to be practically impossible.

On September 9, 2008, Hogrefe attempted to claim copyright over the Rorschach ink blots during fillings of a complaint with the World Intellectual Property Organization against the Brazilian psychologist Ney Limonge. These complaints were denied. Further complaints were sent to two other websites that contained information similar to the Rorschach test in May 2009 by legal firm Schluep and Degen of Switzerland.

Psychologists have sometimes refused to disclose tests and test data to courts when asked to do so by the parties citing ethical reasons; it is argued that such refusals may hinder full understanding of the process by the attorneys, and impede cross-examination of the experts. APA ethical standard 1.23(b) states that the psychologist has a responsibility to document processes in detail and of adequate quality to allow reasonable scrutiny by the court.

Controversy ensued in the psychological community in 2009 when the original Rorschach plates and research results on interpretations were published in the "Rorschach test" article on Wikipedia. Hogrefe & Huber Publishing, a German company that sells editions of the plates, called the publication "unbelievably reckless and even cynical of Wikipedia" and said it was investigating the possibility of legal action. Due to this controversy an edit filter was temporarily established on Wikipedia to prevent the removal of the plates.
Dr. James Heilman, a Canadian emergency room physician involved in the debate, compared it to the publication of the eye test chart: though people are likewise free to memorize the eye chart before an eye test, its general usefulness as a diagnostic tool for eyesight has not diminished. For those opposed to exposure, publication of the inkbloths is described as a "particularly painful development", given the tens of thousands of research papers which have, over many years, "tried to link a patient’s responses to certain psychological conditions." Controversy over Wikipedia’s publication of the inkbloths has resulted in the blots being published in other locations, such as The Guardian and The Globe And Mail.

Publication of the Rorschach images is also welcomed by critics who consider the test to be pseudoscience. Benjamin Radford, editor of Skeptical Inquirer magazine, stated that the Rorschach "has remained in use more out of tradition than good evidence" and was hopeful that publication of the test might finally hasten its demise.

Thematic Apperception Test

The Thematic Apperception Test, or TAT, is a projective psychological test. Historically, it has been among the most widely researched, taught, and used of such tests. Its adherents assert that the TAT taps a subject’s unconscious to reveal repressed aspects of personality, motives and needs for achievement, power and intimacy, and problem-solving abilities.

Procedure

The TAT is popularly known as the picture interpretation technique because it uses a standard series of provocative yet ambiguous pictures about which the subject is asked to tell a story. The subject is asked to tell as dramatic a story as they can for each picture presented, including the following:

- what has led up to the event shown
- what is happening at the moment
- what the characters are feeling and thinking
- what the outcome of the story was

If these elements are omitted, particularly for children or individuals of low cognitive abilities, the evaluator may ask the subject about them directly.

There are 31 picture cards in the standard form of the TAT. Some of the cards show male figures, some female, some both male and female figures, some of ambiguous gender, some adults, some children, and some show no human figures at all. One card is completely blank. Although the cards were originally designed to be matched to the subject in terms of age and gender, any card may be used with any subject. Most practitioners choose a set of approximately ten cards, either using cards that they feel are generally useful, or that they believe will encourage the subject’s expression of emotional conflicts relevant to their specific history and situation.
Scoring Systems

The TAT is a projective test in that, like the Rorschach test, its assessment of the subject is based on what he or she projects onto the ambiguous images. Therefore, to complete the assessment, each narrative created by a subject must be carefully recorded and analyzed to uncover underlying needs, attitudes, and patterns of reaction. Although most clinical practitioners do not use formal scoring systems, several formal scoring systems have been developed for analyzing TAT stories systematically and consistently. Two common methods that are currently used in research are the:

- **Defense Mechanisms Manual DMM.** This assesses three defense mechanisms: denial (least mature), projection (intermediate), and identification (most mature). A person’s thoughts/feelings are projected in stories involved.

- **Social Cognition and Object Relations SCOR scale.** This assesses four different dimensions of object relations: Complexity of Representations of People, Affect-Tone of Relationship Paradigms, Capacity for Emotional Investment in Relationships and Moral Standards, and Understanding of Social Causality.

History

TAT was developed by the American psychologist Henry A. Murray and Christiana D. Morgan at Harvard during the 1930s to explore the underlying dynamics of personality, such as internal conflicts, dominant drives, interests, and motives.

Howard P Vincent was a noted scholar of Herman Melville, the American author best known for his novel Moby-Dick. According to Vincent, the TAT was inspired by the lesson implicit in Moby-Dick Chapter XCIX - THE DOUBLOON: that morality is not what users think it may be. Vincent writes that the TAT

"... came into being when Dr. Henry A. Murray, psychologist and Melvillist, adapted the implicit lesson of Melville's “Doubloon” chapter to a new and larger creative, therapeutic purpose."

After World War II, the TAT was adopted more broadly by psychoanalysts and clinicians to evaluate emotionally disturbed patients. An Indian adaptation was developed in 1960 by Mrs.Uma Choudhary(Uma Choudhary. (1960). Indian Adaptation of TAT.New Delhi: Manasayan.) Later, in the 1970s, the Human Potential Movement encouraged psychologists to use the TAT to help their clients understand themselves better and stimulate personal growth.

Criticisms

Declining adherence to the Freudian principle of repression on which the test is based has caused the TAT to be criticized as false or outdated by some professional psychologists.
Their criticisms are that the TAT is unscientific because it cannot be proved to be valid (that it actually measures what it claims to measure), or reliable (that it gives consistent results over time, due to the challenge of standardizing interpretations of the narratives provided by subjects).

Some critics of the TAT cards have observed that the characters and environments are dated, even ‘old-fashioned,’ creating a ‘cultural or psycho-social distance’ between the patients and the stimuli that makes identifying with them less likely. Also, in researching the responses of subjects given photographs versus the TAT, researchers found that the TAT cards evoked more ‘deviant’ stories (i.e., more negative) than photographs, leading researchers to conclude that the difference was due to the differences in the characteristics of the images used as stimuli.

In a 2005 dissertation, Matthew Narron, Psy.D. attempted to address these issues by reproducing a Leopold Bellak 10 card set photographically and performing an outcome study. The results concluded that the old TAT elicited answers that included many more specific time references than the new TAT.

**Contemporary applications of TAT**

Despite criticisms, the TAT remains widely used as a tool for research into areas of psychology such as dreams, fantasies, mate selection and what motivates people to choose their occupation. Sometimes it is used in a psychiatric or psychological context to assess personality disorders, thought disorders, in forensic examinations to evaluate crime suspects, or to screen candidates for high-stress occupations. It is also commonly used in routine psychological evaluations, typically without a formal scoring system, as a way to explore emotional conflicts and object relations.

- TAT is widely used in France and Argentina using a psychodynamic approach.
- The Israeli army uses the test for evaluating potential officers.
- It is also used by the Services Selection Board of India.

David McClelland and Ruth Jacobs conducted a 12 year longitudinal study of leadership using TAT and found no gender differences motivational predictors of attained management level. The content analysis, however, "revealed 2 distinct styles of power-related themes that distinguished the successful men from the successful women. The successful male managers were more likely to use reactive power themes while the successful female managers were more likely to use resourceful power themes. Differences between the sexes in the power themes were less pronounced among the managers who had remained in lower levels of management.”

**TAT in popular culture**
Thomas Harris’ novel Red Dragon includes a scene where the imprisoned psychiatrist and serial killer Dr. Hannibal Lecter mocks a previous attempt to administer the test to him.

Michael Crichton included the TAT in the battery of tests given to the disturbed patient and main character Harry Benson in his novel, The Terminal Man.

In the novel Sphere, the protagonist Norman Johnson, a psychologist himself, mentions the Thematic Apperception Test while in the underwater deep-sea habitat.

In the MTV cartoon Daria, Daria and her sister Quinn are given a test that appears to be the TAT by the school psychologist on their first day at their new school. Daria and Quinn are shown a picture of two people. Quinn makes up a story about the two people having a discussion about popularity and dating. Daria states that she sees "a herd of beautiful wild ponies running free across the plains." The psychologist tells her the picture is of two people, not ponies. Daria states, "last time I took one of these tests they told me they were clouds. They said they could be whatever I wanted." The psychologist explains, "That's a different test, dear. In this test, they're people and you tell me what they're discussing." To which Daria characteristically replies, "Oh... I see. All right, then. It's a guy and a girl and they're discussing... a herd of beautiful wild ponies running free across the plains." (Cf. the Rorschach test administered to Charlie Gordon in Flowers for Algernon, during which Drs. Nemur and Strauss ask him what he "sees" on a card, he replies that he sees an inkblot, they ask him to pretend that it is something else, and he replies "I pretend a bottel of ink spilld all over a wite card").

The TAT is administered to Alex, the main character of A Clockwork Orange.

Charlie Gordon, the protagonist in Daniel Keyes’s Flowers for Algernon, notes in his "progris riport 4" on March 6 that he was given a "Thematic Apperception Test." As he says, "I dont know the frist 2 werds but I know what test means. You got to pass it or you get bad marks"

Italian poet Edoardo Sanguineti wrote a collection of poetry called T.A.T (1966–1968) that refers to the Test.

**Draw-A-Person Test**

Smiling person (combined head and body) age 4½.
The Draw-A-Person Test (DAP, DAP test, or Goodenough-Harris Draw-A-Person Test) is a psychological projective personality or cognitive test used to evaluate children and adolescents for a variety of purposes.

History

Developed originally by Florence Goodenough in 1926, this test was first known as the Goodenough Draw-A-Man test. It is detailed in her book titled Measurement of Intelligence by Drawings. Dr. Dale B. Harris later revised and extended the test and it is now known as the Goodenough-Harris Drawing Test. The revision and extension is detailed in his book Children's Drawings as Measures of Intellectual Maturity (1963). Psychologist Julian Jaynes, in the 1976 book, The Origin of Consciousness in the Breakdown of the Bicameral Mind wrote that the test is "routinely administered as an indicator of schizophrenia," and that while not all schizophrenic patients have trouble drawing a person, when they do, it is very clear evidence of a disorder. And that such signs might be a patient's neglect to include "obvious anatomical parts like hands and eyes," with "blurred and unconnected lines," ambiguous sexuality and general distortion. There has been no validation of this test as indicative of schizophrenia. Chapman and Chapman (1969), in a classic study of illusory correlation, showed that the scoring manual, e.g., large eyes as indicative of paranoia, could be generated from the naive beliefs of undergraduates.

Nature of the test

Test administration involves the administrator requesting children to complete three individual drawings on separate pieces of paper. Children are asked to draw a man, a woman, and themselves. No further instructions are given and the child is free to make the drawing in whichever way he/she would like. There is no right or wrong type of drawing, although the child must make a drawing of a whole person each time - i.e. head to feet, not just the face. The test has no time limit; however, children rarely take longer than about 10 or 15 minutes to complete all three drawings. Harris's book (1963) provides scoring scales which are used to examine and score the child's drawings. The test is completely non-invasive and non-threatening to children, which is part of its appeal.

To evaluate intelligence, the test administrator uses the Draw-a-Person: QSS (Quantitative Scoring System). This system analyzes fourteen different aspects of the drawings (such as specific body parts and clothing) for various criteria, including presence or absence, detail, and proportion. In all, there are 64 scoring items for each drawing. A separate standard score is recorded for each drawing, and a total score for all three. The use of a nonverbal, nonthreatening task to evaluate intelligence is intended to eliminate possible sources of bias by reducing variables like primary language, verbal skills, communication disabilities, and sensitivity to working under pressure. However, test results can be influenced by previous drawing experience, a factor that may account for the tendency of middle-class children to score higher on this test than lower-class children, who often have fewer opportunities to draw. To assess the test-taker for emotional problems, the administrator uses the Draw-a-Person: SPED (Screening Procedure for Emotional Disturbance) to score the drawings. This system is composed of two types of criteria. For the first type, eight
dimensions of each drawing are evaluated against norms for the child’s age group. For the second type, 47 different items are considered for each drawing.

The purpose of the test is to assist professionals in inferring children’s cognitive developmental levels with little or no influence of other factors such as language barriers or special needs. Any other uses of the test are merely projective and are not endorsed by the first creator.

Sentence completion tests

Sentence completion tests are a class of semi-structured projective techniques. Sentence completion tests typically provide respondents with beginnings of sentences, referred to as “stems,” and respondents then complete the sentences in ways that are meaningful to them. The responses are believed to provide indications of attitudes, beliefs, motivations, or other mental states. There is debate over whether or not sentence completion tests elicit responses from conscious thought rather than unconscious states. This debate would affect whether sentence completion tests can be strictly categorized as projective tests.

A sentence completion test form may be relatively short, such as those used to assess responses to advertisements, or much longer, such as those used to assess personality. A long sentence completion test is the Forer Sentence Completion Test, which has 100 stems. The tests are usually administered in booklet form where respondents complete the stems by writing words on paper.

The structures of sentence completion tests vary according to the length and relative generality and wording of the sentence stems. Structured tests have longer stems that lead respondents to more specific types of responses; less structured tests provide shorter stems, which produce a wider variety of responses.

History

Herman Von Ebbinghaus is generally credited with developing the first sentence completion test in 1897. Ebbinghaus’s sentence completion test was used as part of an intelligence test.

Carl Jung’s word association test may also have been a precursor to modern sentence completion tests.

In recent decades, sentence completion tests have increased in usage, in part because they are easy to develop and easy to administer. As of the 1980s, sentence completion tests were the seventh most widely used personality assessment instruments.

Another reason for the increased usage of sentence completion tests is because of their superiority to other measures in uncovering conflicted attitudes.
Some sentence completion tests were developed as a way to overcome the problems associated with thematic apperception measures of the same constructs.

Uses

The uses of sentence completion tests include personality analysis, clinical applications, attitude assessment, achievement motivation, and measurement of other constructs. They are used in several disciplines, including psychology, management, education, and marketing.

Sentence completion measures have also been incorporated into non-projective applications, such as intelligence tests, language comprehension, and language and cognitive development tests.

Examples of sentence completion tests

There are many sentence completion tests available for use by researchers. Some of the most widely used sentence completion tests include:

- Rotter Incomplete Sentence Blank (assesses personality traits; perhaps the most widely used of all sentence completion tests).
- Miner Sentence Completion Test (measures managerial motivations).
- Washington University Sentence Completion Test (measures ego development).

Data analysis, validity and reliability

The data collected from sentence completion tests can usually be analyzed either quantitatively or qualitatively.

Sentence completion tests usually include some formal coding procedure or manual. The validity of each sentence completion test must be determined independently and this depends on the instructions laid out in the scoring manual.

Compared to positivist instruments, such as Likert-type scales, sentence completion tests tend to have high face validity (i.e., the extent to which measurement items accurately reflect the concept being measured). This is to be expected, because in many cases the sentence stems name or refer to specific objects and the respondent is provides responses specifically focused on such objects.

Kinetic family drawing

Figure drawings are projective diagnostic techniques in which an individual is instructed to draw a person, an object, or a situation so that cognitive, interpersonal, or psychological functioning can be assessed. The Kinetic Family Drawing, developed in 1970 by Burns and Kaufman, requires the test taker to draw a picture of his or her entire family. Children are
asked to draw a picture of their family, including themselves, "doing something." This picture is meant to elicit the child's attitudes toward his or her family and the overall family dynamics. The KFD is sometimes interpreted as part of an evaluation of child abuse.

Interpretations of all projective tests should be made with caution, and the limitations of projective tests should be considered. It is generally a good idea to use projective tests as part of an overall test battery. There is little professional support for the use of figure drawing, so the examples that follow should be interpreted with caution. In particular, in forensic situations, the use of the KFD and other projective tests may be unethical or illegal depending on the jurisdiction.

The Method: Despite the flexibility in administration and interpretation of figure drawings, these tests require skilled and trained administrators familiar with both the theory behind the tests and the structure of the tests themselves. The KFD involves the examiner instructing the child to draw a picture of themselves, and everyone in his or her family, doing something. The examiner may then ask the child questions about the drawing, such as what is happening and who is in the picture. Certain characteristics of the drawing are noted upon analysis, such as the placement of family members; the absence of any members; whether the figures are relatively consistent with reality or altered by the child; the absence of particular body parts; erasures; elevated figures; and so on.

The KFD was created as an extension of the Family Drawing Test (Burns & Kaufman, 1972). The kinetic aspect refers to the instructions given to the child to draw his or her family members doing something.

The KFD is similar to other psychometric projective techniques such as the Draw-A-Person Test (D-A-P) developed by Machover, and the House-Tree-Person (HTP) technique developed by Buck.

**Pencil Paper Test**

**Minnesota Multiphasic Personality Inventory**

The Minnesota Multiphasic Personality Inventory (MMPI) is one of the most frequently used personality tests in mental health. The test is used by trained professionals to assist in identifying personality structure and psychopathology.

**History and development**

The original authors of the MMPI were Starke R. Hathaway, PhD, and J. C. McKinley, MD. The MMPI is copyrighted by the University of Minnesota. The standardized answer sheets can be hand scored with templates that fit over the answer sheets, but most tests are computer scored. Computer scoring programs for the current standardized version, the MMPI-2, are licensed by the University of Minnesota Press to Pearson Assessments and other companies located in different countries. The computer scoring programs offer a
range of scoring profile choices including the extended score report, which includes data on
the newest and most psychometrically advanced scales—the Restructured Clinical, &
Journal of Applied Psychology, 26, 614-624.</ref> The difference between this approach
and other test development strategies used around that time was that it was atheoretical
(not based on any particular theory) and thus the initial test was not aligned with the
prevailing psychodynamic theories of that time. The atheoretical approach to MMPI
development ostensibly enabled the test to capture aspects of human psychopathology that
were recognizable and meaningful despite changes in clinical theories. However, because
the MMPI scales were created based on a group with known psychopathologies, the scales
themselves are not atheoretical by way of using the participants’ clinical diagnoses to
determine the scales’ contents.

MMPI-2

The first major revision of the MMPI was the MMPI-2, which was standardized on a new
national sample of adults in the United States and released in 1989. It is appropriate for use
with adults 18 and over. Subsequent revisions of certain test elements have been
published, and a wide variety of subscales was also introduced over many years to help
clinicians interpret the results of the original clinical scales, which had been found to
contain a general factor that made interpretation of scores on the clinical scales difficult.
The current MMPI-2 has 567 items, all true-or-false format, and usually takes between 1
and 2 hours to complete depending on reading level. There is an infrequently used
abbreviated form of the test that consists of the MMPI-2's first 370 items. The shorter
version has been mainly used in circumstances that have not allowed the full version to be
completed (e.g., illness or time pressure), but the scores available on the shorter version
are not as extensive as those available in the 567-item version.

MMPI-A

A version of the test designed for adolescents, the MMPI-A, was released in 1992. The
MMPI-A has 478 items, with a short form of 350 items.

MMPI-2 RF

A new and psychometrically improved version of the MMPI-2 has recently been developed
employing rigorous statistical methods that were used to develop the RC Scales in 2003.
The new MMPI-2 Restructured Form (MMPI-2-RF) has now been released by Pearson
Assessments. The MMPI-2-RF produces scores on a theoretically grounded, hierarchically
structured set of scales, including the RC Scales. The modern methods used to develop the
MMPI-2-RF were not available at the time the MMPI was originally developed. The MMPI-
2-RF builds on the foundation of the RC Scales, which have been extensively researched
since their publication in 2003. Publications on the MMPI-2-RC Scales include book
chapters, multiple published articles in peer-reviewed journals, and address the use of the
scales in a wide range of settings. The MMPI-2-RF scales rest on an assumption that
psychopathology is a homogenous condition that is additive.
Current scale composition

Clinical scales

Scale 1 (AKA the Hypochondriasis Scale) : Measures a person’s perception and preoccupation with their health and health issues., Scale 2 (AKA the Depression Scale) : Measures a person’s depressive symptoms level., Scale 3 (AKA the Hysteria Scale) : Measures the emotionality of a person., Scale 4 (AKA the Psychopathic Deviate Scale) : Measures a person’s need for control or their rebellion against control., Scale 5 (AKA the Femininity/Masculinity Scale) : Measures a stereotype of a person and how they compare. For men it would be the Marlboro man, for women it would be June Cleaver or Donna Reed., Scale 6 (AKA the Paranoia Scale) : Measures a person’s inability to trust., Scale 7 (AKA the Psychasthenia Scale) : Measures a person’s anxiety levels and tendencies., Scale 8 (AKA the Schizophrenia Scale) : Measures a person’s unusual/odd cognitive, perceptual, and emotional experiences, Scale 9 (AKA the Mania Scale) : Measures a person’s energy., Scale 0 (AKA the Social Introversion Scale) : Measures whether people enjoy and are comfortable being around other people.

The original clinical scales were designed to measure common diagnoses of the era.

<table>
<thead>
<tr>
<th>Number</th>
<th>Abbreviation</th>
<th>Description</th>
<th>What is measured</th>
<th>No. of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hs</td>
<td>Hypochondriasis</td>
<td>Concern with bodily symptoms</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>Depression</td>
<td>Depressive Symptoms</td>
<td>57</td>
</tr>
<tr>
<td>3</td>
<td>Hy</td>
<td>Hysteria</td>
<td>Awareness of problems and vulnerabilities</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>Pd</td>
<td>Psychopathic</td>
<td>Conflict, struggle, anger, respect for society’s rules</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>MF</td>
<td>Masculinity/Femininity</td>
<td>Stereotypical masculine or feminine interests/behaviors</td>
<td>56</td>
</tr>
<tr>
<td>6</td>
<td>Pa</td>
<td>Paranoia</td>
<td>Level of trust, suspiciousness, sensitivity</td>
<td>40</td>
</tr>
<tr>
<td>7</td>
<td>Pt</td>
<td>Psychasthenia</td>
<td>Worry, Anxiety, tension, doubts, obsessiveness</td>
<td>48</td>
</tr>
<tr>
<td>8</td>
<td>Sc</td>
<td>Schizophrenia</td>
<td>Odd thinking and social alienation</td>
<td>78</td>
</tr>
<tr>
<td>9</td>
<td>Ma</td>
<td>Hypomania</td>
<td>Level of excitability</td>
<td>46</td>
</tr>
<tr>
<td>10</td>
<td>Si</td>
<td>Social Introversion</td>
<td>People orientation</td>
<td>69</td>
</tr>
</tbody>
</table>

Codetypes are a combination of the one, two or three (and according to a few authors even four), highest-scoring clinical scales (ex. 4, 8, 2, = 482). Codetypes are interpreted as a single, wider ranged elevation, rather than interpreting each scale individually.
Validity scales

The validity scales in the MMPI-2 RF are minor revisions of those contained in the MMPI-2, which includes three basic types of validity measures: those that were designed to detect non-responding or inconsistent responding (CNS, VRIN, TRIN), those designed to detect when clients are over reporting or exaggerating the prevalence or severity of psychological symptoms (F, Fb, Fp, FBS), and those designed to detect when test-takers are under-reporting or downplaying psychological symptoms (L, K). A new addition to the validity scales for the MMPI-2 RF includes an over reporting scale of somatic symptoms scale (Fs).

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>New in version</th>
<th>Description</th>
<th>Assesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNS</td>
<td>1</td>
<td>&quot;Cannot Say&quot;</td>
<td>Questions not answered</td>
</tr>
<tr>
<td>L</td>
<td>1</td>
<td>Lie</td>
<td>Client &quot;faking good&quot;</td>
</tr>
<tr>
<td>F</td>
<td>1</td>
<td>Infrequency</td>
<td>Client &quot;faking bad&quot; (in first half of test)</td>
</tr>
<tr>
<td>K</td>
<td>1</td>
<td>Defensiveness</td>
<td>Denial/Evasiveness</td>
</tr>
<tr>
<td>Fb</td>
<td>2</td>
<td>Back F</td>
<td>Client &quot;faking bad&quot; (in last half of test)</td>
</tr>
<tr>
<td>VRIN</td>
<td>2</td>
<td>Variable Response Inconsistency</td>
<td>answering similar/opposite question pairs inconsistently</td>
</tr>
<tr>
<td>TRIN</td>
<td>2</td>
<td>True Response Inconsistency</td>
<td>answering questions all true/all false</td>
</tr>
<tr>
<td>F-K</td>
<td>2</td>
<td>F minus K</td>
<td>honesty of test responses/not &quot;faking good or bad&quot;</td>
</tr>
<tr>
<td>S</td>
<td>2</td>
<td>Superlative Self-Presentation</td>
<td>improving upon K scale, &quot;appearing excessively good&quot;</td>
</tr>
<tr>
<td>Fp</td>
<td>2</td>
<td>F-Psychopathology</td>
<td>Frequency of presentation in clinical setting</td>
</tr>
<tr>
<td>Fs</td>
<td>2 RF</td>
<td>Infrequent Somatic Response</td>
<td>Overreporting of somatic symptoms</td>
</tr>
</tbody>
</table>

Content scales

To supplement these multidimensional scales and to assist in interpreting the frequently seen diffuse elevations due to the general factor (removed in the RC scales) were also developed, with the more frequently used being the substance abuse scales (MAC-R, APS, AAS), designed to assess the extent to which a client admits to or is prone to abusing substances, and the A (anxiety) and R (repression) scales, developed by Welsh after conducting a factor analysis of the original MMPI item pool.

Dozens of content scales currently exist, the following are some samples:
Abbreviation | Description
--- | ---
Es | Ego Strength Scale
OH | Over-Controlled Hostility Scale
MAC | MacAndrews Alcoholism Scale
MAC-R | MacAndrews Alcoholism Scale Revised
Do | Dominance Scale
APS | Addictions Potential Scale
AAS | Addictions Acknowledgement Scale
SOD | Social Discomfort Scale
A | Anxiety Scale
R | Repression Scale
TPA | Type A Scale
MDS | Marital Distress Scale

**PSY-5 scales**

Unlike the Content and Supplementary scales, the PSY-5 scales were not developed as a reaction to some actual or perceived shortcoming in the MMPI-2 itself, but rather as an attempt to connect the instrument with more general trend in personality psychology. The five factor model of human personality has gained great acceptance in non-pathological populations, and the PSY-5 scales differ from the 5 factors identified in non-pathological populations in that they were meant to determine the extent to which personality disorders might manifest and be recognizable in clinical populations. The five components were labeled Negative Emotionality (NEGE), Psychoticism (PSYC), Introversion (INTR), Disconstraint (DISC) and Aggressiveness (AGGR).

**Scoring and interpretation**

Like many standardized tests, scores on the various scales of the MMPI-2 and the MMPI-2-RF are not representative of either percentile rank or how "well" or "poorly" someone has done on the test. Rather, analysis looks at relative elevation of factors compared to the various norm groups studied. Raw scores on the scales are transformed into a standardized metric known as T-scores (Mean or Average equals 50, Standard Deviation equals 10), making interpretation easier for clinicians. Test manufacturers and publishers ask test purchasers to prove they are qualified to purchase the MMPI/MMPI-2/MMPI-2-RF and other tests.

**Recent Advancements in the MMPI-2**

**RC and Clinical Scales**

The Restructured Clinical Scales are psychometrically improved versions of the original Clinical Scales, which were known to contain a high level of interscale correlation,
overlapping items, and were confounded by the presence of an overarching factor that has since been extracted and placed in a separate scale (demoralization). The RC scales measure the core constructs of the original clinical scales. Critics of the RC scales assert they have deviated too far from the original clinical scales, the implication being that previous research done on the clinical scales will not be relevant to the interpretation of the RC scales. However, research on the RC scales assert that the RC scales predict pathology in their designated areas better than their concordant original clinical scales while using significantly fewer items and maintaining equal to higher internal consistency reliability and validity; further, unlike the original clinical scales, the RC scales are not saturated with the primary factor (demoralization, now captured in RCdem) which frequently produced diffuse elevations and made interpretation of results difficult; finally, the RC scales have lower interscale correlations and, in contrast to the original clinical scales, contain no interscale item overlap. The effects of removal of the common variance spread across the older clinical scales due to a general factor common to psychopathology, through use of sophisticated psychometric methods were described as a paradigm shift in personality assessment. Critics of the new scales argue that the removal of this common variance makes the RC scales less ecologically valid (less like real life) because real patients tend to present complex patterns of symptoms. However, this issue is addressed by being able to view elevations on other RC scales that are less saturated with the general factor and, therefore, are also more transparent and much easier to interpret.

**Addition of the Lees-Haley FBS (Symptom Validity)**

The following discussion concerns the Lees-Haley validity scale, FBS. After its addition to MMPI-2 the FBS was renamed "Symptom Validity" to address the concerns that its full name appears prejudicial, although the FBS acronym continues to be used in academic publications to refer to Lees-Haley’s scale.

The FBS was developed by psychologist Paul Lees-Haley, who works mainly for defendants (insurance companies etc.) in personal injury cases. The scale was introduced in MMPI after a review of the literature.

One of the critics of the Lees-Haley FBS is retired psychologist James Butcher, who reported that more than 45% of psychiatric patients he studied had FBS scores of 20 or more. These are relatively high scores that suggest symptom exaggeration. While Butcher contends that it is unlikely that so many psychiatric patients intentionally misled their physicians, his study has been criticized by numerous clinical neuropsychologists on methodological and conceptual grounds, including the likelihood that his subject pool included patients who may have had secondary gain motive to feign symptoms, that he ignored recommended gender-related cut-offs, and used a less sensitive or specific MMPI-2 scale as his 'gold-standard.'

An independent professional panel recommended that the Lees-Haley FBS be included in the standard Pearson scoring system.
Several studies by independent Neuropsychologists have since been published in respected peer-reviewed journals supporting the Lees-Haley FBS scale as highly sensitive and specific (when proper cut-offs are used) in identifying individuals who are exaggerating somatic symptoms (as opposed to psychiatric, mood, or neurological symptoms) in settings where the base-rate of malingering is typically high (litigation, pain clinics, etc.), as it was designed to do. The FBS is one of the validity scales that is frequently considered when examining populations with secondary gain motive, particularly disability seeking patients.

In 2008 Butcher and colleagues published a review of the available evidence in Psychological Injury and Law. Ben-Porath and colleagues rebutted the review. Butcher and colleagues have continued to debate the utility of the FBS.

**Myers-Briggs Type Indicator**

Carl Jung in 1910. Myers and Briggs extrapolated their MBTI theory from Jung’s writings in his book Psychological Types.

The Myers-Briggs Type Indicator (MBTI) assessment is a psychometric questionnaire designed to measure psychological preferences in how people perceive the world and make decisions. These preferences were extrapolated from the typological theories proposed by Carl Gustav Jung and first published in his 1921 book Psychological Types (English edition, 1923).
The original developers of the personality inventory were Katharine Cook Briggs and her daughter, Isabel Briggs Myers. They began creating the indicator during World War II, believing that a knowledge of personality preferences would help women who were entering the industrial workforce for the first time to identify the sort of war-time jobs where they would be "most comfortable and effective". The initial questionnaire grew into the Myers-Briggs Type Indicator, which was first published in 1962. The MBTI focuses on normal populations and emphasizes the value of naturally occurring differences.

CPP Inc., the publisher of the MBTI instrument, calls it "the world's most widely used personality assessment", with as many as two million assessments administered annually. The CPP and other proponents state that the indicator meets or exceeds the reliability of other psychological instruments and cite reports of individual behavior. Some studies have found strong support for construct validity, internal consistency, and test-retest reliability, although variation was observed. However, some academic psychologists have criticized the MBTI instrument, claiming that it "lacks convincing validity data". Some studies have shown the statistical validity and reliability to be low. The use of the Myers-Briggs Type Indicator as a predictor of job success has not been supported in studies, and its use for this purpose is expressly discouraged in the Manual.

The definitive published source of reference for the Myers-Briggs Type Indicator is The Manual produced by CPP. However, the registered trademark rights to the terms Myers-Briggs Type Indicator and MBTI have been assigned from the publisher to the Myers-Briggs Type Indicator Trust.

Concepts

As the MBTI Manual states, the indicator "is designed to implement a theory; therefore the theory must be understood to understand the MBTI".

Fundamental to the Myers-Briggs Type Indicator is the theory of psychological type as originally developed by Carl Jung. Jung proposed the existence of two dichotomous pairs of cognitive functions:

**The "rational" (judging) functions: thinking and feeling**

**The "irrational" (perceiving) functions: sensing and intuition**

Jung went on to suggest that these functions are expressed in either an introverted or extraverted form. From Jung’s original concepts, Briggs and Myers developed their own theory of psychological type, described below, on which the MBTI is based.

Type

Jung’s typological model regards psychological type as similar to left or right handedness: individuals are either born with, or develop, certain preferred ways of thinking and acting. The MBTI sorts some of these psychological differences into four opposite pairs, or
dichotomies, with a resulting 16 possible psychological types. None of these types are better or worse; however, Briggs and Myers theorized that individuals naturally prefer one overall combination of type differences. In the same way that writing with the left hand is hard work for a right-hander, so people tend to find using their opposite psychological preferences more difficult, even if they can become more proficient (and therefore behaviorally flexible) with practice and development.

The 16 types are typically referred to by an abbreviation of four letters—the initial letters of each of their four type preferences (except in the case of intuition, which uses the abbreviation N to distinguish it fromIntroversion). For instance:

**ESTJ**: extraversion (E), sensing (S), thinking (T), judgment (J)
**INFP**: introversion (I), intuition (N), feeling (F), perception (P)

And so on for all 16 possible type combinations.

**Four dichotomies**

**Dichotomies**

<table>
<thead>
<tr>
<th>Extraversion (E)</th>
<th>Introversion (I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensing (S)</td>
<td>Intuition (N)</td>
</tr>
<tr>
<td>Thinking (T)</td>
<td>Feeling (F)</td>
</tr>
<tr>
<td>Judgment (J)</td>
<td>Perception (P)</td>
</tr>
</tbody>
</table>

The four pairs of preferences or dichotomies are shown in the table to the right.

Note that the terms used for each dichotomy have specific technical meanings relating to the MBTI which may differ from their everyday usage. For example, people who prefer judgment over perception may not necessarily appear more judgmental or less perceptive in their behavior. Nor does the MBTI instrument measure aptitude; it simply indicates for one preference over another. Someone reporting a high score for extraversion over introversion cannot be correctly described as more extraverted: they simply have a clear preference.

Point scores on each of the dichotomies can vary considerably from person to person, even among those with the same type. However, Isabel Myers considered the direction of the preference (for example, E vs. I) to be more important than the degree of the preference (for example, very clear vs. slight). The expression of a person's psychological type is more than the sum of the four individual preferences. The preferences interact through type dynamics and type development.

**Attitudes: Extraversion (E)/Introversion (I)**

Myers-Briggs literature uses the terms extraversion and introversion as Jung first used them. Extraversion means "outward-turning" and introversion means "inward-turning."
These specific definitions vary somewhat from the popular usage of the words. Note that extraversion is the spelling used in MBTI publications.

The preferences for extraversion and introversion are often called as attitudes. Briggs and Myers recognized that each of the cognitive functions can operate in the external world of behavior, action, people, and things (extraverted attitude) or the internal world of ideas and reflection (introverted attitude). The MBTI assessment sorts for an overall preference for one or the other.

People who prefer extraversion draw energy from action: they tend to act, then reflect, then act further. If they are inactive, their motivation tends to decline. To rebuild their energy, extraverts need breaks from time spent in reflection. Conversely, those who prefer introversion expend energy through action: they prefer to reflect, then act, then reflect again. To rebuild their energy, introverts need quiet time alone, away from activity.

The extravert's flow is directed outward toward people and objects, and the introvert's is directed inward toward concepts and ideas. Contrasting characteristics between extraverts and introverts include the following:

- Extraverts are action oriented, while introverts are thought oriented.
- Extraverts seek breadth of knowledge and influence, while introverts seek depth of knowledge and influence.
- Extraverts often prefer more frequent interaction, while introverts prefer more substantial interaction.
- Extraverts recharge and get their energy from spending time with people, while introverts recharge and get their energy from spending time alone.

**Functions: Sensing (S)/Intuition (N) and Thinking (T)/Feeling (F)**

Jung identified two pairs of psychological functions:

- The two perceiving functions, sensing and intuition
- The two judging functions, thinking and feeling

According to the Myers-Briggs typology model, each person uses one of these four functions more dominantly and proficiently than the other three; however, all four functions are used at different times depending on the circumstances.

Sensing and intuition are the information-gathering (perceiving) functions. They describe how new information is understood and interpreted. Individuals who prefer sensing are more likely to trust information that is in the present, tangible and concrete: that is, information that can be understood by the five senses. They tend to distrust hunches, which seem to come "out of nowhere." They prefer to look for details and facts. For them, the meaning is in the data. On the other hand, those who prefer intuition tend to trust information that is more abstract or theoretical, that can be associated with other information (either remembered or discovered by seeking a wider context or pattern).
They may be more interested in future possibilities. They tend to trust those flashes of insight that seem to bubble up from the unconscious mind. The meaning is in how the data relates to the pattern or theory.

Thinking and feeling are the decision-making (judging) functions. The thinking and feeling functions are both used to make rational decisions, based on the data received from their information-gathering functions (sensing or intuition). Those who prefer thinking tend to decide things from a more detached standpoint, measuring the decision by what seems reasonable, logical, causal, consistent and matching a given set of rules. Those who prefer feeling tend to come to decisions by associating or empathizing with the situation, looking at it 'from the inside' and weighing the situation to achieve, on balance, the greatest harmony, consensus and fit, considering the needs of the people involved.

As noted already, people who prefer thinking do not necessarily, in the everyday sense, "think better" than their feeling counterparts; the opposite preference is considered an equally rational way of coming to decisions (and, in any case, the MBTI assessment is a measure of preference, not ability). Similarly, those who prefer feeling do not necessarily have "better" emotional reactions than their thinking counterparts.

**Dominant function**

According to Myers and Briggs, people use all four cognitive functions. However, one function is generally used in a more conscious and confident way. This dominant function is supported by the secondary (auxiliary) function, and to a lesser degree the tertiary function. The fourth and least conscious function is always the opposite of the dominant function. Myers called this inferior function the shadow.

The four functions operate in conjunction with the attitudes (extraversion and introversion). Each function is used in either an extraverted or introverted way. A person whose dominant function is extraverted intuition, for example, uses intuition very differently from someone whose dominant function is introverted intuition.

**Lifestyle: Judgment (J)/Perception (P)**

Myers and Briggs added another dimension to Jung's typological model by identifying that people also have a preference for using either the judging function (thinking or feeling) or their perceiving function (sensing or intuition) when relating to the outside world (extraversion).

Myers and Briggs held that types with a preference for judgment show the world their preferred judging function (thinking or feeling), so TJ types tend to appear to the world as logical, and FJ types as empathetic. According to Myers, judging types like to "have matters settled."
Those types who prefer perception show the world their preferred perceiving function (sensing or intuition). So SP types tend to appear to the world as concrete and NP types as abstract. According to Myers;75 perceptive types prefer to "keep decisions open."

For extraverts, the J or P indicates their dominant function; for introverts, the J or P indicates their auxiliary function. Introverts tend to show their dominant function outwardly only in matters "important to their inner worlds.":13 For example:

Because ENTJ types are extraverts, the J indicates that their dominant function is their preferred judging function (extraverted thinking). ENTJ types introvert their auxiliary perceiving function (introverted intuition). The tertiary function is sensing and the inferior function is introverted feeling.

Because INTJ types are introverts, the J indicates that their auxiliary function is their preferred judging function (extraverted thinking). INTJ types introvert their dominant perceiving function (introverted intuition). The tertiary function is feeling, and the inferior function is extraverted sensing.

**Historical development**

Katharine Cook Briggs began her research into personality in 1917. Upon meeting her future son-in-law, she observed marked differences between his personality and that of other family members. Briggs embarked on a project of reading biographies, and she developed a typology based on patterns she found. She proposed four temperaments: Meditative (or Thoughtful), Spontaneous, Executive, and Social. Then, after the English translation of Psychological Types was published in 1923 (having first been published in German in 1921), she recognized that Jung’s theory was similar to, yet went far beyond, her own.:22 Briggs’s four types were later identified as corresponding to the Is, EPs, ETJs and EFPs. Her first publications were two articles describing Jung’s theory, in the journal New Republic in 1926 (Meet Yourself Using the Personality Paint Box) and 1928 (Up From Barbarism).

Briggs’s daughter, Isabel Briggs Myers, added to her mother’s typological research, which she would progressively take over entirely. Myers graduated first in her class from Swarthmore College in 1919:xx and wrote the prize-winning mystery novel Murder Yet to Come in 1929 using typological ideas. However, neither Myers nor Briggs were formally educated in psychology, and thus they lacked scientific credentials in the field of psychometric testing:xiii So Myers apprenticed herself to Edward N. Hay, who was then personnel manager for a large Philadelphia bank and went on to start one of the first successful personnel consulting firms in the U.S. From Hay, Myers learned test construction, scoring, validation, and statistics:xiii, xx In 1942, the "Briggs-Myers Type Indicator" was created, and the Briggs Myers Type Indicator Handbook was published in 1944. The indicator changed its name to the modern form (Myers-Briggs Type Indicator) in 1956.
Myers’ work attracted the attention of Henry Chauncey, head of the Educational Testing Service, and under these auspices, the first MBTI Manual was published in 1962. The MBTI received further support from Donald T. McKinnon, head of the Institute of Personality Research at the University of California; Harold Grant, professor at Michigan State and Auburn Universities; and Mary H. McCaulley of the University of Florida. The publication of the MBTI was transferred to Consulting Psychologists Press in 1975, and the Center for Applications of Psychological Type (CAPT) was founded as a research laboratory. After Myers’ death in May 1980, Mary McCaulley updated the MBTI Manual, and the second edition was published in 1985. The third edition appeared in 1998.

**Differences from Jung**

**Judgment vs. perception**

The most notable addition of Myers and Briggs to Jung’s original thought is their concept that a given type’s fourth letter (J or P) is determined by how that type interacts with the external world, rather than by the type’s dominant function. The difference becomes evident when assessing the cognitive functions of introverts.

To Jung, a type with dominant introverted thinking, for example, would be considered rational (judging) because the decision-making function is dominant. To Myers, however, that same type would be irrational (perceiving) because the individual uses an information-gathering function (either extraverted intuition or extraverted sensing) when interacting with the outer world.

**Orientation of the tertiary function**

Jung theorized that the dominant function acts alone in its preferred world: exterior for the extraverts, and interior for the introverts. The remaining three functions, he suggested, operate together in the opposite world. If the dominant cognitive function is introverted, the other functions are extraverted, and vice versa. The MBTI Manual summarizes references in Jung’s work to the balance in psychological type as follows:

There are several references in Jung’s writing to the three remaining functions having an opposite attitudinal character. For example, in writing about introverts with thinking dominant... Jung commented that the counterbalancing functions have an extraverted character.

However, many MBTI practitioners hold that the tertiary function is oriented in the same direction as the dominant function. Using the INTP type as an example, the orientation would be as follows:

- Dominant introverted thinking
- Auxiliary extraverted intuition
- Tertiary introverted sensing
- Inferior extraverted feeling
From a theoretical perspective, noted psychologist H.J. Eysenck calls the MBTI a moderately successful quantification of Jung’s original principles as outlined in Psychological Types. However, both models remain theory, with no controlled scientific studies supporting either Jung’s original concept of type or the Myers-Briggs variation.

Applications

The indicator is frequently used in the areas of pedagogy, career counseling, team building, group dynamics, professional development, marketing, family business, leadership training, executive coaching, life coaching, personal development, marriage counseling, and workers’ compensation claims.

Format and administration

The current North American English version of the MBTI Step I includes 93 forced-choice questions (there are 88 in the European English version). Forced-choice means that the individual has to choose only one of two possible answers to each question. The choices are a mixture of word pairs and short statements. Choices are not literal opposites but chosen to reflect opposite preferences on the same dichotomy. Participants may skip questions if they feel they are unable to choose.

Using psychometric techniques, such as item response theory, the MBTI will then be scored and will attempt to identify the preference, and clarity of preference, in each dichotomy. After taking the MBTI, participants are usually asked to complete a Best Fit exercise (see below) and then given a readout of their Reported Type, which will usually include a bar graph and number to show how clear they were about each preference when they completed the questionnaire.

During the early development of the MBTI thousands of items were used. Most were eventually discarded because they did not have high midpoint discrimination, meaning the results of that one item did not, on average, move an individual score away from the midpoint. Using only items with high midpoint discrimination allows the MBTI to have fewer items on it but still provide as much statistical information as other instruments with many more items with lower midpoint discrimination. The MBTI requires five points one way or another to indicate a clear preference.

Additional formats

Isabel Myers had noted that people of any given type shared differences as well as similarities. At the time of her death, she was developing a more in-depth method of measuring how people express and experience their individual type pattern.

In 1987, an advanced scoring system was developed for the MBTI. From this was developed the Type Differentiation Indicator (TDI) (Saunders, 1989) which is a scoring system for the longer MBTI, Form J, which includes the 290 items written by Myers that
had survived her previous item analyses. It yields 20 subscales (five under each of the four dichotomous preference scales), plus seven additional subscales for a new Comfort-Discomfort factor (which purportedly corresponds to the missing factor of Neuroticism).

This factor’s scales indicate a sense of overall comfort and confidence versus discomfort and anxiety: guarded-optimistic, defiant-compliant, carefree-worried, decisive-ambivalent, intrepid-inhibited, leader-follower, and proactive-distractible. Also included is a composite of these called "strain." Each of these comfort-discomfort subscales also loads onto one of the four type dimensions; for example, proactive-distractible is also a judging-perceiving subscale. There are also scales for type-scale consistency and comfort-scale consistency. Reliability of 23 of the 27 TDI subscales is greater than 0.50, "an acceptable result given the brevity of the subscales" (Saunders, 1989).

In 1989, a scoring system was developed for only the 20 subscales for the original four dichotomies. This was initially known as Form K, or the Expanded Analysis Report (EAR). This tool is now called the MBTI Step II. Form J or the TDI became known as Step III. It was developed in a joint project involving the following organizations: CPP, the publisher of the whole family of MBTI works; CAPT (Center for Applications of Psychological Type), which holds all of Myers' and McCaulley's original work; and the MBTI Trust, headed by Katharine and Peter Myers. Step III was advertised as addressing type development and the use of perception and judgment by respondents.

Precepts and ethics

The following precepts are generally used in the ethical administration of the Myers-Briggs Type Indicator:

Type not trait
The MBTI sorts for type; it does not indicate the strength of ability. The questionnaire allows the clarity of a preference to be ascertained (Bill clearly prefers introversion), but not the strength of preference (Jane strongly prefers extraversion) or degree of aptitude (Harry is good at thinking). In this sense, it differs from trait-based tools such as 16PF. Type preferences are polar opposites: a precept of MBTI is that people fundamentally prefer one thing over the other, not a bit of both.

Own best judge
Individuals are considered the best judge of their own type. While the MBTI questionnaire provides a Reported Type, this is considered only an indication of their probable overall Type. A Best Fit Process is usually used to allow respondents to develop their understanding of the four dichotomies to form their own hypothesis as to their overall Type, and to compare this against the Reported Type. In more than 20% of cases, the hypothesis and the Reported Type differ in one or more dichotomies. Using the clarity of each preference, any potential for bias in the report, and often, a comparison of two or more whole Types may then help respondents determine their own Best Fit.
No right or wrong
No preference or total type is considered better or worse than another. They are all Gifts Differing, as emphasized by the title of Isabel Briggs Myers’ book on this subject.

Voluntary
It is considered unethical to compel anyone to take the Myers-Briggs Type Indicator. It should always be taken voluntarily.

Confidentiality
The result of the MBTI Reported and Best Fit type are confidential between the individual and administrator and, ethically, not for disclosure without permission.

Not for selection
The results of the assessment should not be used to "label, evaluate, or limit the respondent in any way" (emphasis original). Since all types are valuable, and the MBTI measures preferences rather than aptitude, the MBTI is not considered a proper instrument for purposes of employment selection. Many professions contain highly competent individuals of different types with complementary preferences.

Importance of proper feedback
Individuals should always be given detailed feedback from a trained administrator and an opportunity to undertake a Best Fit exercise to check against their Reported Type. This feedback can be given in person or, where this is not practical, by telephone or electronically.

Type dynamics and development

The Sixteen Types

US Population Breakdown

The table organizing the sixteen types was created by Isabel Myers (an INFP).

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISTJ</td>
<td>11–14%</td>
</tr>
<tr>
<td>ISFP</td>
<td>5–9%</td>
</tr>
<tr>
<td>ESTJ</td>
<td>8–12%</td>
</tr>
<tr>
<td>INFJ</td>
<td>1–3%</td>
</tr>
<tr>
<td>ISFP</td>
<td>9–14%</td>
</tr>
<tr>
<td>ENFP</td>
<td>6–9%</td>
</tr>
<tr>
<td>ESTP</td>
<td>4–5%</td>
</tr>
<tr>
<td>ESFP</td>
<td>4–9%</td>
</tr>
<tr>
<td>NSTP</td>
<td>4–6%</td>
</tr>
<tr>
<td>ESFP</td>
<td>9–13%</td>
</tr>
<tr>
<td>INTJ</td>
<td>2–4%</td>
</tr>
<tr>
<td>INTP</td>
<td>3–5%</td>
</tr>
<tr>
<td>ENTP</td>
<td>5–6%</td>
</tr>
<tr>
<td>ENTJ</td>
<td>2–5%</td>
</tr>
</tbody>
</table>

Estimated percentages of the 16 types in the U.S. population.

The interaction of two, three, or four preferences is known as type dynamics. Although type dynamics has garnered little or no empirical support to substantiate its viability as a
scientific theory, Myers and Briggs asserted that for each of the 16 four-preference types, one function is the most dominant and is likely to be evident earliest in life. A secondary or auxiliary function typically becomes more evident (differentiated) during teenage years and provides balance to the dominant. In normal development, individuals tend to become more fluent with a third, tertiary function during mid life, while the fourth, inferior function remains least consciously developed. The inferior function is often considered to be more associated with the unconscious, being most evident in situations such as high stress (sometimes referred to as being in the grip of the inferior function).

The sequence of differentiation of dominant, auxiliary, and tertiary functions through life is termed type development. Note that this is an idealized sequence that may be disrupted by major life events.

The dynamic sequence of functions and their attitudes can be determined in the following way:

- The overall lifestyle preference (J-P) determines whether the judging (T-F) or perceiving (S-N) preference is most evident in the outside world; i.e., which function has an extraverted attitude
- The attitude preference (E-I) determines whether the extraverted function is dominant or auxiliary
- For those with an overall preference for extraversion, the function with the extraverted attitude will be the dominant function. For example, for an ESTJ type the dominant function is the judging function, thinking, and this is experienced with an extraverted attitude. This is notated as a dominant Te. For an ESTP, the dominant function is the perceiving function, sensing, notated as a dominant Se.
- The Auxiliary function for extraverts is the secondary preference of the judging or perceiving functions, and it is experienced with an introverted attitude: for example, the auxiliary function for ESTJ is introverted sensing (Si) and the auxiliary for ESTP is introverted thinking (Ti).
- For those with an overall preference for introversion, the function with the extraverted attitude is the auxiliary; the dominant is the other function in the main four letter preference. So the dominant function for ISTJ is introverted sensing (Si) with the auxiliary (supporting) function being extraverted thinking (Te).
- The Tertiary function is the opposite preference from the Auxiliary. For example, if the Auxiliary is thinking then the Tertiary would be feeling. The attitude of the Tertiary is the subject of some debate and therefore is not normally indicated; i.e. if the Auxiliary was Te then the Tertiary would be F (not Fe or Fi)
- The Inferior function is the opposite preference and attitude from the Dominant, so for an ESTJ with dominant Te the Inferior would be Fi.

Note that for extraverts, the dominant function is the one most evident in the external world. For introverts, however, it is the auxiliary function that is most evident externally, as their dominant function relates to the interior world.

Some examples of whole types may clarify this further. Taking the ESTJ example above:
• Extraverted function is a judging function (T-F) because of the overall J preference
• Extraverted function is dominant because of overall E preference
• Dominant function is therefore extraverted thinking (Te)
• Auxiliary function is the preferred perceiving function: introverted sensing (Si)
• Tertiary function is the opposite of the Auxiliary: intuition
• Inferior function is the opposite of the Dominant: introverted feeling (Fi)

The dynamics of the ESTJ are found in the primary combination of extraverted thinking as their dominant function and introverted sensing as their auxiliary function: the dominant tendency of ESTJs to order their environment, to set clear boundaries, to clarify roles and timetables, and to direct the activities around them is supported by their facility for using past experience in an ordered and systematic way to help organize themselves and others. For instance, ESTJs may enjoy planning trips for groups of people to achieve some goal or to perform some culturally uplifting function. Because of their ease in directing others and their facility in managing their own time, they engage all the resources at their disposal to achieve their goals. However, under prolonged stress or sudden trauma, ESTJs may overuse their extraverted thinking function and fall into the grip of their inferior function, introverted feeling. Although the ESTJ can seem insensitive to the feelings of others in their normal activities, under tremendous stress, they can suddenly express feelings of being unappreciated or wounded by insensitivity.

Looking at the diametrically opposite four-letter type, INFP:

• Extraverted function is a perceiving function (S-N) because of the P preference
• Introverted function is dominant because of the I preference
• Dominant function is therefore introverted feeling (Fi)
• Auxiliary function is extraverted intuition (Ne)
• Tertiary function is the opposite of the Auxiliary: sensing
• Inferior function is the opposite of the Dominant: extraverted thinking (Te)

The dynamics of the INFP rest on the fundamental correspondence of introverted feeling and extraverted intuition. The dominant tendency of the INFP is toward building a rich internal framework of values and toward championing human rights. They often devote themselves behind the scenes to causes such as civil rights or saving the environment. Since they tend to avoid the limelight, postpone decisions, and maintain a reserved posture, they are rarely found in executive-director type positions of the organizations that serve those causes. Normally, the INFP dislikes being "in charge" of things. When not under stress, the INFP radiates a pleasant and sympathetic demeanor; but under extreme stress, they can suddenly become rigid and directive, exerting their extraverted thinking erratically.

Every type, and its opposite, is the expression of these interactions, which give each type its unique, recognizable signature.
Correlations to other instruments

Keirsey Temperaments

David W. Keirsey mapped four 'temperaments' to the existing Myers-Briggs system groupings SP, SJ, NF and NT; this often results in confusion of the two theories. However, the Keirsey Temperament Sorter is not directly associated with the official Myers-Briggs Type Indicator.

<table>
<thead>
<tr>
<th>IST.J</th>
<th>ISF.J</th>
<th>INF.J</th>
<th>INT.J</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspector</td>
<td>Protector</td>
<td>Counselor</td>
<td>Mastermind</td>
</tr>
<tr>
<td>IST.P</td>
<td>IS.F.P</td>
<td>INF.P</td>
<td>INT.P</td>
</tr>
<tr>
<td>Crafter</td>
<td>Composer</td>
<td>Healer</td>
<td>Architect</td>
</tr>
<tr>
<td>ES.T.P</td>
<td>ES.F.P</td>
<td>EN.F.P</td>
<td>EN.T.P</td>
</tr>
<tr>
<td>Promoter</td>
<td>Performer</td>
<td>Champion</td>
<td>Inventor</td>
</tr>
<tr>
<td>EST.J</td>
<td>ES.F.J</td>
<td>EN.F.J</td>
<td>ENT.J</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Provider</td>
<td>Teacher</td>
<td>Fieldmarshal</td>
</tr>
</tbody>
</table>

Big Five

McCrae and Costa present correlations between the MBTI scales and the Big Five personality construct, which is a conglomeration of characteristics found in nearly all personality and psychological tests. The five personality characteristics are extraversion, openness, agreeableness, conscientiousness, and emotional stability (or neuroticism). The following study is based on the results from 267 men followed as part of a longitudinal study of aging. (Similar results were obtained with 201 women.)

<table>
<thead>
<tr>
<th></th>
<th>Extraversion</th>
<th>Openness</th>
<th>Agreeableness</th>
<th>Conscientiousness</th>
<th>Neuroticism</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-I</td>
<td>-0.74</td>
<td>0.03</td>
<td>-0.03</td>
<td>0.08</td>
<td>0.16</td>
</tr>
<tr>
<td>S-N</td>
<td>0.10</td>
<td>0.72</td>
<td>0.04</td>
<td>-0.15</td>
<td>-0.06</td>
</tr>
<tr>
<td>T-F</td>
<td>0.19</td>
<td>0.02</td>
<td>0.44</td>
<td>-0.15</td>
<td>0.06</td>
</tr>
<tr>
<td>J-P</td>
<td>0.15</td>
<td>0.30</td>
<td>-0.06</td>
<td>-0.49</td>
<td>0.11</td>
</tr>
</tbody>
</table>

The closer the number is to 1.0 or -1.0, the higher the degree of correlation.

These data suggest that four of the MBTI scales are related to the Big Five personality traits. These correlations show that E-I and S-N are strongly related to extraversion and openness respectively, while T-F and J-P are moderately related to agreeableness and conscientiousness respectively. The emotional stability dimension of the Big Five is largely absent from the original MBTI (though the TDI, discussed above, has addressed that dimension).

These findings led McCrae and Costa, the formulators of the Five Factor Model (a Big Five theory), to conclude, "correlational analyses showed that the four MBTI indices did
measure aspects of four of the five major dimensions of normal personality. The five-factor model provides an alternative basis for interpreting MBTI findings within a broader, more commonly shared conceptual framework." However, "there was no support for the view that the MBTI measures truly dichotomous preferences or qualitatively distinct types, instead, the instrument measures four relatively independent dimensions."

**Origins of the theory**

Jung’s theory of psychological type, as published in his 1921 book, was not tested through controlled scientific studies. Jung’s methods primarily included clinical observation, introspection and anecdote—methods that are largely regarded as inconclusive by the modern field of psychology.

Jung’s type theory introduced a sequence of four cognitive functions (thinking, feeling, sensing, and intuition), each having one of two orientations (extraverted or introverted), for a total of eight functions. The Myers-Briggs theory is based on these eight functions, although with some differences in expression (see Differences from Jung above). However, neither the Myers-Briggs nor the Jungian models offer any scientific, experimental proof to support the existence, the sequence, the orientation, or the manifestation of these functions.

**Validity**

The statistical validity of the MBTI as a psychometric instrument has been the subject of criticism. It has been estimated that between a third and a half of the published material on the MBTI has been produced for conferences of the Center for the Application of Psychological Type (which provides training in the MBTI) or as papers in the Journal of Psychological Type (which is edited by Myers-Briggs advocates). It has been argued that this reflects a lack of critical scrutiny.

For example, some researchers expected that scores would show a bimodal distribution with peaks near the ends of the scales, but found that scores on the individual subscales were actually distributed in a centrally peaked manner similar to a normal distribution. A cut-off exists at the center of the subscale such that a score on one side is classified as one type, and a score on the other side as the opposite type. This fails to support the concept of type: the norm is for people to lie near the middle of the subscale. Nevertheless, "the absence of bimodal score distributions does not necessarily prove that the 'type'-based approach is incorrect."

In 1991, the National Academy of Sciences committee reviewed data from MBTI research studies and concluded that only the I-E scale has adequate construct validity in terms of showing high correlations with comparable scales of other instruments and low correlations with instruments designed to assess different concepts. In contrast, the S-N and T-F scales show relatively weak validity. The 1991 review committee concluded at the time there was "not sufficient, well-designed research to justify the use of the MBTI in career counseling programs". However, this study also based its measurement of validity
on "criterion-related validity (i.e., does the MBTI predict specific outcomes related to interpersonal relations or career success/job performance?)." The ethical guidelines of the MBTI assessment stress that the MBTI type "does not imply excellence, competence, or natural ability, only what is preferred." The 2009 MBTI Form M Manual Supplement states, "An instrument is said to be valid when it measures what it has been designed to measure (Ghiselli, Campbell, & Zedeck, 1981; Murphy & Davidshofer, 2005)." Studies have found that the MBTI scores compare favorably to other assessments with respect to evidence of convergent validity, divergent validity, construct validity, internal consistency, and test-retest reliability.

The accuracy of the MBTI depends on honest self-reporting by the person tested.:52-53 Unlike some personality measures, such as the Minnesota Multiphasic Personality Inventory or the Personality Assessment Inventory, the MBTI does not use validity scales to assess exaggerated or socially desirable responses. As a result, individuals motivated to do so can fake their responses, and one study found that the MBTI judgment/perception dimension correlates with the Eysenck Personality Questionnaire lie scale. If respondents "fear they have something to lose, they may answer as they assume they should.":53 However, the MBTI ethical guidelines state, "It is unethical and in many cases illegal to require job applicants to take the Indicator if the results will be used to screen out applicants." The intent of the MBTI is to provide "a framework for understanding individual differences, and ... a dynamic model of individual development".

The terminology of the MBTI has been criticized as being very "vague and general" as to allow any kind of behavior to fit any personality type, which may result in the Forer effect, where individuals give a high rating to a positive description that supposedly applies specifically to them. Others argue that while the MBTI type descriptions are brief, they are also distinctive and precise.:14-15 Some theorists, such as David Keirsey, have expanded on the MBTI descriptions, providing even greater detail. For instance, Keirsey's descriptions of his four temperaments, which he correlated with the sixteen MBTI personality types, show how the temperaments differ in terms of language use, intellectual orientation, educational and vocational interests, social orientation, self image, personal values, social roles, and characteristic hand gestures.:32-207

With regard to factor analysis, one study of 1291 college-aged students found six different factors instead of the four used in the MBTI. In other studies, researchers found that the JP and the SN scales correlate with one another.

**Reliability**

Some researchers have found the reliability of the test to be low. A study found that only 36% of those who took the Myers-Briggs test scored as the same type when retested 9 months later.

One study reports that the MBTI dichotomies exhibit good split-half reliability; however, the dichotomy scores are distributed in a bell curve, and the overall type allocations are less reliable. Also, test-retest reliability is sensitive to the time between tests. Within each
dichotomy scale, as measured on Form G, about 83% of categorizations remain the same when individuals are retested within nine months, and around 75% when individuals are retested after nine months. About 50% of people tested within nine months remain the same overall type, and 36% remain the same type after more than nine months. For Form M (the most current form of the MBTI instrument), the MBTI Manual reports that these scores are higher (p. 163, Table 8.6).

In one study, when people were asked to compare their preferred type to that assigned by the MBTI assessment, only half of people picked the same profile. Critics also argue that the MBTI lacks falsifiability, which can cause confirmation bias in the interpretation of results.

Utility

In her research, Isabel Myers found that the proportion of different personality types varied by choice of career or course of study.40-51 However, some researchers examining the proportions of each type within varying professions report that the proportion of MBTI types within each occupation is close to that within a random sample of the population. Some researchers have expressed reservations about the relevance of type to job satisfaction, as well as concerns about the potential misuse of the instrument in labeling individuals.

Studies suggest that the MBTI is not a useful predictor of job performance. As noted above under Precepts and ethics, the MBTI measures preference, not ability. The use of the MBTI as a predictor of job success is expressly discouraged in the Manual.78 It is not designed for this purpose.

Keirsey Temperament Sorter

The Keirsey Temperament Sorter (KTS) is a self-assessed personality questionnaire designed to help people better understand themselves and others. It was first introduced in the book Please Understand Me. The KTS is closely associated with the Myers-Briggs Type Indicator (MBTI); however, there are significant practical and theoretical differences between the two personality questionnaires and their associated different descriptions.

Four temperaments

David Keirsey expanded on the ancient study of temperament by Hippocrates and Plato. In his works, Keirsey used the names suggested by Plato: Artisan (iconic), Guardian (pistic), Idealist (noetic), and Rational (dianoetic). Keirsey divided the four temperaments into two categories (roles), each with two types (role variants). The resulting 16 types correlate with the 16 personality types described by Briggs and Myers.

- **Artisans** are observant and pragmatic. Seeking stimulation and virtuosity, they are concerned with making an impact. Their greatest strength is tactics. They excel at
troubleshooting, agility, and the manipulation of tools, instruments, and equipment. The two roles are as follows:

1. **Operators** are the directive Artisans. Their most developed intelligence operation is expediting. The attentive Crafters and the expressive Promoters are the two role variants.

2. **Entertainers** are the informative Artisans. Their most developed intelligence operation is improvising. The attentive Composers and the expressive Performers are the two role variants.

- **Guardians** are observant and cooperative. Seeking security and belonging, they are concerned with responsibility and duty. Their greatest strength is logistics. They excel at organizing, facilitating, checking, and supporting. The two roles are as follows:

  1. **Administrators** are the directive Guardians. Their most developed intelligence operation is regulating. The attentive Inspectors and the expressive Supervisors are the two role variants.

  2. **Conservators** are the informative Guardians. Their most developed intelligence operation is supporting. The attentive Protectors and the expressive Providers are the two role variants.

- **Idealists** are introspective and cooperative. Seeking meaning and significance, they are concerned with personal growth and finding their own unique identity. Their greatest strength is diplomacy. They excel at clarifying, individualizing, unifying, and inspiring. The two roles are as follows:

  1. **Mentors** are the directive Idealists. Their most developed intelligence operation is developing. The attentive Counselors and the expressive Teachers are the two role variants.

  2. **Advocates** are the informative Idealists. Their most developed intelligence operation is mediating. The attentive Healers and the expressive Champions are the two role variants.

- **Rationals** are introspective and pragmatic. Seeking mastery and self-control, they are concerned with their own knowledge and competence. Their greatest strength is strategy. They excel in any kind of logical investigation such as engineering, conceptualizing, theorizing, and coordinating. The two roles are as follows:

  1. **Coordinators** are the directive Rationals. Their most developed intelligence operation is arranging. The attentive Masterminds and the expressive Fieldmarshals are the two role variants.

  2. **Engineers** are the informative Rationals. Their most developed intelligence operation is constructing. The attentive Architects and the expressive Inventors are the two role variants.
Understanding the sorter descriptions

Although the descriptions of the individual temperaments and role variants were written as a whole, temperament itself can be understood by comparing it to the rings of a tree:

The inner ring: abstract versus concrete

According to Keirsey, everyone can engage in both observation and introspection. When people touch objects, watch a basketball game, taste food, or otherwise perceive the world through their five senses, they are observant. When people reflect and focus on their internal world, they are introspective. However, individuals cannot engage in observation and introspection at the same time. The extent to which people are more observant or introspective directly affects their behavior.

People who are generally observant are more 'down to earth.' They are more concrete in their worldview and tend to focus on practical matters such as food, shelter, and their immediate relationships. Carl Jung used the word sensation when describing people who prefer concrete perception. People who are generally introspective are more 'head in the clouds.' They are more abstract in their world view and tend to focus on global or theoretical issues such as equality or engineering. Carl Jung used the word intuition when describing people who prefer abstract perception.

The second ring: cooperative versus pragmatic (utilitarian)

Keirsey uses the words cooperative (complying) and pragmatic (adaptive) when comparing the differing temperaments. People who are cooperative pay more attention to other people’s opinions and are more concerned with doing the right thing. People who are pragmatic (utilitarian) pay more attention to their own thoughts or feelings and are more concerned with doing what works. There is no comparable idea of Myers or Jung that corresponds to this dichotomy, so this is a significant difference between Keirsey’s work and that of Myers and Jung.

This ring, in combination with the inner ring, determines a person’s temperament. The pragmatic temperaments are Rationals (pragmatic and abstract) and Artisans (pragmatic and concrete). The cooperative temperaments are Idealists (cooperative and abstract), and Guardians (cooperative and concrete). Neither Myers nor Jung included the concept of temperament in their work.

The third ring: directive (proactive) versus informative (reactive)

The third ring distinguishes between people who generally communicate by informing others versus people who generally communicate by directing others. Each of the four temperaments is subdivided by this distinction for a result of eight roles.

The directive roles are Operators (directive Artisans), Administrators (directive Guardians), Mentors (directive Idealists), and Coordinators (directive Rationals). The
informative roles are Entertainers (informative Artisans), Conservators (informative Guardians), Advocates (informative Idealists), and Engineers (informative Rationals).

**The fourth ring: expressive versus attentive**

The fourth ring describes how people interact with their environment. Individuals who tend to act before observing are described as expressive, whereas people who tend to observe before acting are described as attentive.

Each of the eight categories can be subdivided by this distinction, for a total of 16 role variants. These 16 role variants correlate to the 16 Myers-Briggs types.

**The expressive role variants** are Promoters (expressive Operators), Performers (expressive Entertainers), Supervisors (expressive Administrators), Providers (expressive Conservators), Teachers (expressive Mentors), Champions (expressive Advocates), Fieldmarshals (expressive Coordinators), and Inventors (expressive Engineers).

**The attentive role variants** are Crafters (attentive Operators), Composers (attentive Entertainers), Inspectors (attentive Administrators), Protectors (attentive Conservators), Counselors (attentive Mentors), Healers (attentive Advocates), Masterminds (attentive Coordinators), and Architects (attentive Engineers).

**Four interaction roles**

In his book Brains and Careers (2008), Keirsey divided the role variants into groupings that he called "four differing roles that people play in face-to-face interaction with one another."

**There are two Proactive Enterprising Roles:**

- Initiators (expressive and directive): Field Marshal (ENTJ), Supervisor (ESTJ), Promoter (ESTP), Teacher (ENFJ)—Preemptive
- Contenders (attentive and directive): Mastermind (INTJ), Inspector (ISTJ), Crafter (ISTP), Counselor (INFI)—Competitive

**There are two Reactive Inquiring Roles:**

- Coworkers (expressive and informative): Inventor (ENTP), Provider (ESFJ), Performer (ESFP), Champion (ENFP)—Collaborative
- Responders (attentive and informative): Architect (INTP), Protector (ISFJ), Composer (ISFP), Healer (INFP)—Accommodative

The roles were implied in the informing/directing factor introduced in Portraits of Temperament.

**Temperaments and intelligence types**
The following table shows how the four rings relate to one another and to the various temperaments.

<table>
<thead>
<tr>
<th>Abstract or Concrete?</th>
<th>Temperament</th>
<th>Role</th>
<th>Role Variant</th>
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</thead>
<tbody>
<tr>
<td>Introspective (N)</td>
<td>Idealist (NF) diplomatic</td>
<td>Mentor (NF) Developing</td>
<td>Teacher (ENFJ): Educating</td>
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<tr>
<td></td>
<td></td>
<td>Advocate (NFP) Mediating</td>
<td>Counselor (INFP): Guiding</td>
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<td></td>
<td></td>
<td></td>
<td>Healer (INFP): Conciliating</td>
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<tr>
<td>Rational (NT)</td>
<td>Coordinator (NT) Arranging</td>
<td>Fieldmarshal (ENTJ): Mobilizing</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Mastermind (INTJ): Entailing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engineer (NTP) Constructing</td>
<td>Inventor (ENTP): Devising</td>
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<td></td>
<td></td>
<td>Architect (INTP): Designing</td>
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<tr>
<td>Observant (S)</td>
<td>Guardian (SJ) Logistical</td>
<td>Administrator (ST) Regulating</td>
<td>Supervisor (ESTJ): Enforcing</td>
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<td></td>
<td></td>
<td></td>
<td>Inspector (ISTJ): Certifying</td>
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<td></td>
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<td>Conserver (SFJ) Supporting</td>
<td>Provider (ESFJ): Supplying</td>
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<td></td>
<td>Protector (ISFJ): Securing</td>
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<tr>
<td>Artisan (SP)</td>
<td>Operator (STP) Expediting</td>
<td>Promoter (ESTP): Persuading</td>
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<td></td>
<td></td>
<td></td>
<td>Crafter (ISTP): Instrumenting</td>
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<td></td>
<td>Entertainer (SFP) Improvising</td>
<td>Performer (ESFP): Demonstrating</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Composer (ISFP): Synthesizing</td>
</tr>
</tbody>
</table>

**Myers-Briggs types versus Keirsey’s temperaments**

The type descriptions of Isabel Myers differ from the character descriptions of David Keirsey in several important ways:

- Myers primarily focused on how people think and feel; Keirsey focused more on behavior, which is directly observable.
- Myers’ descriptions use a linear four-factor model; Keirsey’s descriptions use a systems field theory model.
- Myers, following Jung’s lead, emphasized the extraversion/introversion (expressive/attentive) dichotomy; Keirsey’s model places greater importance on the sensing/intuition (concrete/abstract) dichotomy.
- Myers grouped types by ‘function attitudes’; Keirsey, by temperament.

Myers grouped types according to cognitive function: the ‘thinking type’ grouping for those with dominant thinking; the ‘intuitive type’ grouping for those with dominant intuition; the ‘feeling type’ grouping for those with dominant feeling; and the ‘sensing type’ grouping for those with dominant sensing. Keirsey’s temperaments correlate with Myers’ combinations of preferences: Guardians with sensing plus judging (SJ); Artisans with sensing plus...
perceiving (SP); Idealists with intuition plus feeling (NF); and Rationals with intuition plus thinking (NT).

Myers paired ESTJs with ENTJs, ISFPs with INFPs, INTPs with ISTPs, and ENFJs with ESFJs because they share the same dominant function attitude. ESTJs and ENTJs are both extraverted thinkers, ISFPs and INFPs are both introverted feelers, INTPs and ISTPs are both introverted thinkers, and ENFJs and ESFJs are both extraverted feelers. Keirsey holds that these same groupings are very different from one another because they are of different temperaments. ESTJs are Guardians whereas ENTJs are Rationals; ISFPs are Artisans whereas INFPs are Idealists; INTPs are Rationals whereas ISTPs are Artisans; and ENFJs are Idealists whereas ESFJs are Guardians.

16PF Questionnaire

16 primary traits, Big Five, which have become popularized by other authors in recent years. From early in his research, Cattell found that the structure of personality was multi-level and hierarchical, with a structure of interdependent primary and secondary level traits (Cattell, 1946, 1957). The sixteen primary factors were a result of factor-analyzing hundreds of measures of everyday behaviors to find the fundamental traits behind them. Then, they discovered the five global (or second-order) factors by factor-analyzing the sixteen primary traits themselves, to find the basic, organizing forces among the sixteen basic traits. Thus, the 16PF test gives scores on both the five second-order global traits which provide an overview of personality at a broader, conceptual level, as well as on the more-numerous and precise primary traits, which give a picture of the richness and complexity of each unique personality. A listing of these traits can be found in the article on the 16 Personality Factor Model. Cattell also found that there was a third-order level of personality organization that contained just two over-arching, top-level factors (Cattell, 1957), but little time has been spent on defining this most abstract level of personality organization.

The test is an integral part of Cattell’s comprehensive theory of individual differences. The tests 70 years of research have shown it to be useful in predicting behavior in a range of settings, and to provide an in-depth, integrated picture of the individual’s whole personality. For example, it is commonly used in schools and colleges, clinical and counseling settings, in career counseling and employee selection and development, as well as in basic personality research. Research has indicated that the test is useful in predicting a wide variety of behaviors, such as creativity, academic success, cognitive style, empathy and interpersonal skills, leadership potential, conscientiousness, self-esteem, frustration tolerance, coping patterns, marital compatibility, and job performance. The test has also been translated into over 35 languages and dialects, and is widely used internationally. However, Cattell’s findings have never been repeated by an independent research team. Reports of widespread use should be balanced with a concern for avoiding over-interpretation of personality questionnaire results, particularly in making major judgments of a tested person such as hiring.
Cattell and his co-workers also developed parallel personality questionnaires to measure traits in other age-ranges, such as the Adolescent Personality Questionnaire for ages 12 to 18 years. A shorter version, the 16PF Select Questionnaire, was developed for personnel settings. Cattell also developed non-verbal measures of ability, such as the three scales of the Culture-Fair Intelligence Test as well as tests of motivation.

**Outline of Test**

The most recent edition of the Sixteen Personality Factor Questionnaire (16PF), released in 1993, is the fifth edition of the original test. The test was first published in 1949; the second and third editions were published in 1956 and 1962, respectively; and the five alternative forms of the fourth edition were released between 1967 and 1969. The goal of the fifth edition revision was to update, improve, and simplify the language used in the test items; simplify the answer format; develop new validity scales; improve the psychometric properties of the test, including new reliability and validity data; and to develop a new standardization sample (of 10,000 people) to reflect the current U.S. Census population.

The 16PF Fifth Edition contains 185 multiple-choice items which are written at a fifth-grade reading level. Of these items, 76% were from the four previous 16PF editions, although many of them were re-written to simplify or update the language. The item content typically sounds non-threatening and asks simple questions about daily behavior, interests, and opinions. One particular characteristic of the 16PF Questionnaire is that its items tend to sample a broad range of actual behavior by asking questions about daily, concrete situations, rather than asking the test-taker to simply make a self-assessment of their own personality traits as some tests do (e.g. current popular tests include "I am a warm and friendly person; I am not a worrier; I am an even tempered person."). That type of simple, self-rating type question tends to be substantially related to the person’s own self-image, and dependent on the individual’s view of themselves, their level of self-awareness, and their defensiveness about their actual traits. Instead, most 16PF questions tend to ask about actual behavioral situations:

- When I find myself in a boring situation, I usually "tune out" and daydream about other things. True/False.
- When a bit of tact and convincing is needed to get people moving, I’m usually the one who does it. True/False.

The test provides scores on 16 primary personality scales and 5 global personality scales, all of which are bi-polar (both ends of each scale have a distinct, meaningful definition). The test also includes three validity scales: a bi-polar Impression Management (IM) scale, an Acquiescence (ACQ) scale, and an Infrequency (INF) scale. The reasoning ability (Factor B) items appear at the end of the test booklet with separate instructions, because they are the only items that have right and wrong answers.

Administration of the test takes about 35–50 minutes for the paper-and-pencil version and about 30 minutes by computer. The test instructions are simple and straightforward, and the test is un-timed, and thus it is generally self-administrable and can be used in either an
individual or a group setting. The 16PF test was designed for adults at least age 16 and older, but there are also parallel tests for various younger age ranges (e.g., the 16PF Adolescent Personality Questionnaire).

The 16PF Questionnaire has been translated into more than 35 languages and dialects. Thus the test can be administered in different languages, scored based on either local, national, or international normative samples, and computerized interpretive reports provided in about 15 different languages. The test has generally been culturally adapted (rather than just translated) in these countries, with local standardization samples plus reliability and validity information collected locally and presented in individual manuals.

The test can be hand-scored using a set of scoring keys, or computer-scored by mailing-in or faxing-in the answer sheet to the Publisher IPAT™. There is also a software system that can be used to administer, score, and provide reports on the test results directly in the professional’s office; and an Internet-based system which can also provide administration, scoring, and reports at any Internet-enabled computer in a range of different languages. There are about a dozen computer-generated interpretive reports which can be used to help interpret the test for different purposes, for example, the Personal Career Development Profile, the Karson Clinical Report, The Couples Counseling Report, the Human Resource Development Report, the Teamwork Development Report, and the Leadership Coaching Report. There are also many books that help with test interpretation, for example, 16PF Interpretation in Clinical Practice (Karson, Karson, & O'Dell, 1997), The 16PF: Personality in Depth (Cattell, H.B., 1989), or Essentials of the 16PF (Cattell, H.E. & Schuerger, J.M, 2003)

A shorter version of the test, the 16PF Select (Cattell, Cattell, Cattell & Kelly, 1999), was developed for use in time-sensitive, employee selection settings, and includes fewer items per scale than the regular test. The 16PF Express (Gorsuch, 2007) is a very short, 15-minute, version of the test which has about four items per factor and a wider answer format (items have a four-point or five-point answer format), which is used mainly for research. The 16PF traits are also included in the PsychEval Personality Questionnaire (PEPQ), which combines measures of both normal and abnormal personality traits into one test (Cattell, Cattell, Cattell, Russell, & Bedwell, 2003)

**History and development**

The 16PF Questionnaire was created from a fairly unique perspective among personality tests. Most personality tests are developed to measure just the pre-conceived traits that are of interest to a particular theorist or researcher. The main author of the 16PF, Raymond B. Cattell, had a strong background in the physical sciences, especially chemistry and physics, at a time when the basic elements of the physical world were being discovered, placed in the periodic table, and used as the basis for understanding the fundamental nature of the physical world and for further inquiry. From this background in the physical sciences, Cattell developed the belief that all fields are best understood by first seeking to find the fundamental underlying elements in that domain, and then developing a valid way to measure and research these elements (Cattell, 1965)
When Cattell moved from the physical sciences into the field of psychology in the 1920s, he described his disappointment about finding that it consisted largely of a wide array of abstract, unrelated theories and concepts that had little or no scientific bases. He found that most personality theories were based on philosophy and on personal conjecture, or were developed by medical professionals, such as Jean Charcot and Sigmund Freud, who relied on their personal intuition to reconstruct what they felt was going on inside people, based on observing individuals with serious psycho-pathological problems. Cattell (1957) described the concerns he felt as a scientist:

“In psychology there is an ocean of spawning intuitions and comfortable assumptions which we share with the layman, and out of which we climb with difficulty to the plateaus of scientific objectivity....Scientific advance hinges on the introduction of measurement to the field under investigation....Psychology has bypassed the necessary descriptive, taxonomic, and metric stages through which all healthy sciences first must pass....If Aristotle and other philosophers could get no further by sheer power of reasoning in two thousand years of observation, it is unlikely that we shall do so now.... For psychology to take its place as an effective science, we must become less concerned with grandiose theory than with establishing, through research, certain basic laws of relationship.” (p.3-5)

Thus, Cattell’s goal in creating the “16PF Questionnaire” was to discover the number and nature of the fundamental traits of human personality and to develop a way to measure these dimensions. At the University of London, Cattell worked with Charles Spearman who was developing factor analysis to aid in his quest to discover the basic factors of human ability. Cattell thought that could also be applied to the area of personality. He reasoned that human personality must have basic, underlying, universal dimensions just as the physical world had basic building blocks (like oxygen and hydrogen). He felt that if the basic building blocks of personality were discovered and measured, then human behavior (e.g., creativity, leadership, altruism, or aggression) could become increasingly understandable and predictable.

Cattell and his colleagues began a comprehensive program of international research aimed at identifying and mapping out the basic underlying dimensions of personality. Their goal was to systematically measure the widest possible range of personality concepts, in a belief that “all aspects of human personality which are or have been of importance, interest, or utility have already become recorded in the substance of language” (Cattell, R. B., 1943, p. 483). They wanted to include every known personality dimension in their investigation, and thus began with the largest existing compilation of personality traits (Allport and Odbert, 1936). Over time, they used factor analysis to reduce the massive list of traits by analyzing the underlying patterns among them. They studied personality data from different sources (e.g. objective measures of daily behavior, interpersonal ratings, and questionnaire results), and measured these traits in diverse populations, including working adults, university students, and military personnel. (Cattell, 1957, 1973).

Over several decades of factor-analytic study, Cattell and his colleagues gradually refined and validated their list of underlying source traits. The search resulted in the sixteen
unitary traits of the 16PF Questionnaire. These traits have remained the same over the last 50 years of research. In addition, the 16PF Questionnaire traits are part of a multi-variate personality model that provides a broader framework including developmental, environmental, and hereditary patterns of the traits and how they change across the life span (Cattell, 1973, 1979, 1980).

The validity of the factor structure of the 16PF Questionnaire (the 16 primary factors and 5 global factors) has been supported by more than 60 published studies (Cattell & Krug, 1986; Conn & Rieke, 1994; Hofer and Eber, 2002). Research has also supported the comprehensiveness of the 16PF traits: all dimensions on other major personality tests (e.g., the NEO Personality Inventory, the California Psychological Inventory, the Personality Research Form, and the Myers-Briggs Type Indicator) have been found to be contained within the 16PF scales in regression and factor-analytic studies (Conn & Rieke, 1994; Cattell, 1996).

**The Original Big Five Traits**

From the beginning of his research, Cattell found personality traits to have a multi-level, hierarchical structure (Cattell, 1946). The first goal of these researchers was to find the most fundamental primary traits of personality. Next they factor-analyzed these numerous primary traits to see if these traits had a structure of their own—i.e. if some of them naturally went together in self-defining, meaningful groupings.

They consistently found that the primary traits themselves came together in particular, meaningful groupings to form broader secondary or global traits, each with its own particular focus and function within personality (Cattell & Schuerger, 2003). For example, the first global trait they found was Extraversion-Introversion. It resulted from the natural affinity of five primary traits that defined different reasons for an individual to move toward versus away from other people (see below). They found that there was a natural tendency for these traits to go together in the real world, and to define an important domain of human behavior—social behavior. This global factor Global Extraversion/Introversion (the tendency to move toward versus away from interaction with others) is composed from the following primary traits:

- **Warmth (Factor A):** the tendency to move toward others seeking closeness and connection because of genuine feelings of caring, sympathy, and concern (versus the tendency to be reserved and detached, and thus be independent and unemotional).
- **Liveliness (Factor F):** the tendency to be high-energy, fun-loving, and carefree, and to spontaneously move towards others in an animated, stimulating manner. Low-scorers tend to be more serious and self-restrained, and to be cautious, unrushed, and judicious.
- **Social Boldness (Factor H):** the tendency to seek social interaction in a confident, fearless manner, enjoying challenges, risks, and being the center of attention. Low-scorers tend to be shy and timid, and to be more modest and risk-avoidant.
- **Forthrightness (Factor N):** the tendency to want to be known by others—to be open, forthright, and genuine in social situations, and thus to be self-revealing and
unguarded. Low-scorers tend to be more private and unself-revealing, and to be harder to get to know.

- Affiliative (Factor Q2): the tendency to seek companionship and enjoy belonging to and functioning in a group (inclusive, cooperative, good follower, willing to compromise). Low-scorers tend to be more individualistic and self-reliant and to value their autonomy.

In a similar manner, these researchers found that four other primary traits consistently merged to define another global factor which they called Receptivity or Openness (versus Tough-Mindedness). This factor was made up of four primary traits that describe different kinds of openness to the world:

- Openness to sensitive feelings, emotions, intuition, and aesthetic dimensions (Sensitivity – Factor I)
- Openness to abstract, theoretical ideas, conceptual thinking, and imagination (Abstractedness – Factor M)
- Openness to free thinking, inquiry, exploration of new approaches, and innovative solutions (Openness-to-Change – Factor Q1) and
- Openness to people and their feelings (Warmth – Factor A).

Another global factor, Self-Controlled (or conscientious) versus Unrestrained, resulted from the natural coming together of four primary factors that define the different ways that human beings manage to control their behavior:

- Rule-Consciousness (Factor G) involves adopting and conscientiously following society’s accepted standards of behavior
- Perfectionism (Factor Q3) describes a tendency to be self-disciplined, organized, thorough, attentive to detail, and goal-oriented
- Seriousness (Factor F) involves a tendency to be cautious, reflective, self-restrained, and deliberate in making decisions; and
- Groundedness (Factor M) involves a tendency to stay focused on concrete, pragmatic, realistic solutions.

Because the global factors were developed by factor-analyzing the primary traits, the meanings of the global traits were determined by the primary traits which made them up. In addition, then the global factors provide the over-arching, conceptual framework for understanding the meaning and function of each of the primary traits. Thus, the two levels of personality are essentially inter-connected and inter-related.

However it is the primary traits that provide a clear definition of the individual’s unique personality. Two people might have exactly the same level of Extraversion, but still be quite different from each other. For example, they may both be at the 80% on Extraversion, and both tend to move toward others to the same degree, but they may be doing it for quite different reasons. One person might achieve an 80% on Extraversion by being high on Social Boldness (Factor H: confident, bold, talkative, adventurous, fearless attention-seeking) and on Liveliness (Factor F: high-energy, enthusiastic, fun-loving, impulsive), but
Reserved (low on Factor A: detached, cool, unfeeling, objective). This individual would be talkative, bold, and impulsive but not very sensitive to others' needs or feelings. The second Extravert might be high on Warmth (Factor A: kind, soft-heated, caring and nurturing), and Group-Oriented (low Factor Q2: companionable, cooperative, and participating), but Shy (low on Factor H: timid, modest, and easily embarrassed). This second Extravert would tend to show quite different social behavior and be caring, considerate, and attentive to others but not forward, bold or loud—and thus have quite a different effect on his/her social environment.

Today, the global traits of personality are commonly known as the Big Five. The Big Five traits are most important for getting an abstract, theoretical understanding of the big, overarching domains of personality, and in understanding how different traits of personality relate to each other and how different research findings relate to each other. The big-five are important for understanding and interpreting an individual's personality profile mainly in getting a broad overview of their personality make-up at the highest level of personality organization. However, it is still the scores on the more specific primary traits that define the rich, unique personality make-up of any individual. These more-numerous primary traits have repeatedly been found to be the most powerful in predicting and understanding the complexity of actual daily behavior (Ashton, 1998; Goldberg, 1999; Mershon & Gorsuch, 1988; Paunonen & Ashton, 2001).

Sally–Anne test

The Sally–Anne test is a psychological test, used in developmental psychology to measure a person's social cognitive ability to attribute false beliefs to others (Wimmer & Perner, 1983). In 1988, Leslie and Frith repeated the experiment with human actors (rather than dolls) and found similar results.

Test description

The experimenter uses two dolls, "Sally" and "Anne". Sally has a basket; Anne has a box. Experimenters show their subjects (usually children) a simple skit, in which Sally puts a marble in her basket and then leaves the scene. While Sally is away and cannot watch, Anne takes the marble out of Sally's basket and puts it into her box. Sally then returns and the children are asked where they think she will look for her marble. Children are said to "pass" the test if they understand that Sally will most likely look inside her basket before realizing that her marble isn't there.

Children under the age of four, along with most autistic children (of older ages), will answer "Anne's box," seemingly unaware that Sally does not know her marble has been moved.

In the Baron-Cohen study of theory of mind in autism, 61 children—20 of whom were diagnosed autistic under established criteria, 14 with Down's Syndrome and 27 of whom were determined as clinically unimpaired—were tested with "Sally" and "Anne".
In the test process, after introducing the dolls, the child is asked the control question of recalling their names (the Naming Question). A short skit is then enacted; Sally takes a marble and hides it in her basket. She then 'leaves' the room and goes for a walk. Whilst she is away, and therefore unbeknownst to her, Anne takes the marble out of Sally's basket and puts it in her own box. Sally is then reintroduced and the child is asked the key question, the Belief Question: 'Where will Sally look for her marble?'

For the children to 'pass' this test they must answer the Belief Question correctly, by indicating that Sally believes that the marble is in her own basket, continuous with her perspective although not with the child's own. If the child cannot take an alternative perspective, they will indicate that Sally has cause to believe—as they do—that the marble has moved. To pass, the children have to show that Sally has her own beliefs that may not correlate with reality.

The result of the Baron-Cohen study was that 23 of the 27 clinically unimpaired children (85%) passed the Belief Question, 12 of the 14 Down's Syndrome children (86%) passed and, by contrast, only 4 of the 20 autistic children (20%) passed the test.

**Autism Spectrum Quotient**

The Autism Spectrum Quotient, or AQ, is a questionnaire published in 2001 by Simon Baron-Cohen and his colleagues at the Autism Research Centre in Cambridge, UK. Consisting of fifty questions, it aims to investigate whether adults of average intelligence have symptoms of autism or one of the other autism spectrum conditions. More recently, versions of the AQ for children and adolescents have also been published.

The test was popularised by Wired Magazine in December 2001 when published alongside their article, "The Geek Syndrome" and is commonly used for self diagnosis of Asperger syndrome and high-functioning autism.

**Format**

The test consists of 50 statements, each of which is in a forced-choice format. Each question allows the subject to indicate "Definitely agree", "Slightly agree", "Slightly disagree" or "Definitely disagree". Approximately half the questions are worded to elicit an "agree" response from normal individuals, and half to elicit a "disagree" response. The subject scores one point for each question which is answered "autistically" either slightly or definitely.

The questions cover five different domains associated with the autism spectrum: social skills; communication skills; imagination; attention to detail; and attention switching/tolerance of change. Factor analysis of sample results have been inconsistent, with various studies finding two, three or four factors instead of five.
More recently, versions have been published for children and adolescents.

**Use as a diagnostic tool**

In the initial trials of the test, the average score in the control group was 16.4, with men scoring slightly higher than women (about 17 versus about 15). 80% of adults diagnosed with autism spectrum disorders scored 32 or more, compared with only 2% of the control group.

The authors cited a score of 32 or more as indicating "clinically significant levels of autistic traits". However, although the test is popularly used for self-diagnosis of Asperger syndrome, the authors caution that it is not intended to be diagnostic, and advise that anyone who obtains a high score and is suffering some distress should seek professional medical advice before jumping to any conclusions.

A further research paper indicated that the questionnaire could be used for screening in clinical practice, with scores less than 26 indicating that a diagnosis of Asperger syndrome can effectively be ruled out.

It is also often used to assess milder variants of autistic-like traits in typically developing individuals to investigate the continuum hypothesis of autism spectrum condition.

**Mathematicians, scientists, and engineers**

Although most students with Asperger syndrome or high functioning autism have average mathematical ability and test slightly worse in mathematics than in general intelligence, some are gifted in mathematics and Asperger syndrome has not prevented some adults from major accomplishments such as winning the Nobel Prize.

The questionnaire was trialled on Cambridge University students, and a group of sixteen winners of the British Mathematical Olympiad, to determine whether there was a link between a talent for mathematical and scientific disciplines and traits associated with the autism spectrum. Mathematics, physical sciences and engineering students were found to score significantly higher, e.g. 21.8 on average for mathematicians and 21.4 for computer scientists. The average score for the British Mathematical Olympiad winners was 24. Of the students who scored 32 or more on the test, eleven agreed to be interviewed and seven of these were reported to meet the DSM-IV criteria for Asperger syndrome, although no formal diagnosis was made as they were not suffering any distress. The test was also taken by a group of subjects who had been diagnosed with autism or Asperger syndrome by a professional, the average score being 35 and 38 for males and females respectively.

**ProScan Survey**

The ProScan Survey is an instrument designed by Professional DynaMetric Programs, Inc. (PDP) to measure the major aspects of self-perception, including an individual’s basic
behavior, reaction to environment, and predictable behavior. It was originally developed beginning in 1976 by Dr. Samuel R. Houston, Dr. Dudley Solomon, and Bruce M. Hubby, President of PDP, Inc.

The ProScan Survey contains 60 adjectives drawn from the works of Thurstone, Cattell, Guilford, Fiske, Horst, Daniels, and others. Respondents are requested to react to each adjective on five-point Likert Scale under two separate perceptions, Basic Self and Priority Environment(s). The ProScan Survey typically takes 15 minutes to administer, but has no time constraint. Validity of the instrument has been researched using four well-known approaches--construct, concurrent, predictive, and content validity, and was normed using a cross section of working adults. The survey is intended for the normal segment of society and is no way designed to serve as a pathological finding device nor is it to be used in isolation without considering other factors such as experience, education, references, observations, or other relevant, observable factors.

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It classifies the following factors of human behavior:

**Dominance:** Individuals with high scores on this factor are described as concerned about getting thing done, very competitive, decisive, calculating, and risk takers. Those with low scores are described as non-confrontive, supportive, cautious, and risk avoiders.

**Extroversion:** Individuals with high scores on this factor are described as outgoing, friendly, optimistic, and persuasive. Those with low scores are described as reserved, quiet, and introspective in social situations.

**Pace/Patience:** Individuals with high pace/patience scores are described as relaxed, dependable, likable, and at ease or cooperative with their environment. Those with low pace/patience scores are described as intense, action-oriented, pressing, spontaneous, and receptive to change.

**Conformity/Structure:** Individual with high scores on this factor are described as very precise, dedicated, careful, and concerned about what is “right.” Those with low scores on this factor are described as independent, free thinkers, and non-traditional.

**Logic/Rationale:** Individuals with high scores on logic/rational are described as fact-oriented and analytical. Those with low scores are described as feeling-oriented and intuitive.

Interpretive reports of the results also provide information describing:
- Energy level
- Environmental stress
- Direction of stress in behavioral changes
- Energy lost due to stress
- Satisfaction/Morale
- Primary and back-up leadership styles
- Primary and back up communication styles
- Primary and back up approaches to task or goals
- Environmental preferences
- Motivators and demotivators

ProScan has been used in a wide variety of professional settings for assistance in hiring, motivating, coaching, and managing employees. Some of the fields in which ProScan has been used include education, financial services, hotel management, software companies, and the trucking industry.

**DISC assessment**

DISC is a group of psychological inventories developed by John Geier, and others, and based on the 1928 work of psychologist William Moulton Marston and the original behavioralist Walter V. Clarke and others.

**History**

DISC is a quadrant behavioral model based on the work of Dr. William Moulton Marston (1893–1947) to examine the behavior of individuals in their environment or within a specific situation (otherwise known as environment). It therefore focuses on the styles and preferences of such behavior.

Marston graduated from doctoral studies at Harvard in the newly developing field of psychology. He was also a consulting psychologist, researcher, and author or co-author of five books. His works were showcased in Emotions of Normal People in 1928, among others.

This system of dimensions of observable behavior has become known as the universal language of behavior. Research has found that characteristics of behavior can be grouped into these four major "personality styles" and they tend to exhibit specific characteristics common to that particular style. All individuals possess all four, but what differs from one to another is the extent of each.

For most, these types are seen in shades of grey rather than black or white, and within that, there is an interplay of behaviors, otherwise known as blends. The determination of such blends starts with the primary (or stronger) type, followed by the secondary (or lesser) type, although all contribute more than just purely the strength of that "signal".
Having understood the differences between these blends makes it possible to integrate individual team members with less troubleshooting. In a typical team, there are varying degrees of compatibility, not just toward tasks but interpersonal relationships as well. However, when they are identified, energy can be spent on refining the results.

Each of these types has its own unique value to the team, ideal environment, general characteristics, what the individual is motivated by, and value to team.

DISC is also used in an assortment of areas, including by many companies, HR professionals, organizations, consultants, coaches and trainers...

**Method**

The assessments classify four aspects of behavior by testing a person’s preferences in word associations (compare with Myers-Briggs Type Indicator). DISC is an acronym for:

- **Dominance** – relating to control, power and assertiveness
- **Influence** – relating to social situations and communication
- **Steadiness** (submission in Marston’s time) – relating to patience, persistence, and thoughtfulness
- **Conscientiousness** (or caution, compliance in Marston’s time) – relating to structure and organization

These four dimensions can be grouped in a grid with "D" and "I" sharing the top row and representing extroverted aspects of the personality, and "C" and "S" below representing introverted aspects. "D" and "C" then share the left column and represent task-focused aspects, and "I" and "S" share the right column and represent social aspects. In this matrix, the vertical dimension represents a factor of "Assertive" or "Passive", while the horizontal dimension represents "Open" vs. "Guarded".

- **Dominance**: People who score high in the intensity of the "D" styles factor are very active in dealing with problems and challenges, while low "D" scores are people who want to do more research before committing to a decision. High "D" people are described as demanding, forceful, egocentric, strong willed, driving, determined, ambitious, aggressive, and pioneering. Low D scores describe those who are conservative, low keyed, cooperative, calculating, undemanding, cautious, mild, agreeable, modest and peaceful.
- **Influence**: People with high "I" scores influence others through talking and activity and tend to be emotional. They are described as convincing, magnetic, political, enthusiastic, persuasive, warm, demonstrative, trusting, and optimistic. Those with low "I" scores influence more by data and facts, and not with feelings. They are described as reflective, factual, calculating, skeptical, logical, suspicious, matter of fact, pessimistic, and critical.
- **Steadiness**: People with high "S" styles scores want a steady pace, security, and do not like sudden change. High "S" individuals are calm, relaxed, patient, possessive, predictable, deliberate, stable, consistent, and tend to be unemotional and poker
faced. Low "S" intensity scores are those who like change and variety. People with low "S" scores are described as restless, demonstrative, impatient, eager, or even impulsive.

- **Conscientious**: People with high "C" styles adhere to rules, regulations, and structure. They like to do quality work and do it right the first time. High "C" people are careful, cautious, exacting, neat, systematic, diplomatic, accurate, and tactful. Those with low "C" scores challenge the rules and want independence and are described as self-willed, stubborn, opinionated, unsystematic, arbitrary, and unconcerned with details.

### Revised NEO Personality Inventory

The Revised NEO Personality Inventory, or NEO PI-R, is a psychological personality inventory; a 240-item measure of the Five Factor Model: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. Additionally, the test measures six subordinate dimensions (known as ‘facets’) of each of the "FFM" personality factors. The test was developed by Paul T. Costa, Jr. and Robert R. McCrae for use with adult (17+) men and women without overt psychopathology. The short version, the NEO-Five Factor Inventory (NEO-FFI), has 60 items (12 items per domain). The NEO PI-R and NEO-FFI were updated in 2010 in a manual called the NEO Inventories for the NEO Personality Inventory-3, NEO Five-Factor Model 3, and NEO Personality Inventory-Revised. While the NEO PI-R is still being published, the NEO-PI-3 and NEO-FFI-3 feature updated normative data and new forms.

#### Personality dimensions

A list of the personality dimensions measured by the NEO PI-R, including facets, is as follows:

**Neuroticism**

- Anxiety
- Hostility
- Depression
- Self-Consciousness
- Impulsiveness
- Vulnerability to Stress

**Extraversion**

- Warmth
- Gregariousness
- Assertiveness
- Activity
- Excitement Seeking
- Positive Emotion
Openness to experience
- Fantasy
- Aesthetics
- Feelings
- Actions
- Ideas
- Values

Agreeableness
- Trust
- Straightforwardness
- Altruism
- Compliance
- Modesty
- Tendermindedness

Conscientiousness
- Competence
- Order
- Dutifulness
- Achievement Striving
- Self-Discipline
- Deliberation

Name

The original version of the measurement was the Neuroticism-Extroversion-Openness Inventory (NEO-I). This version only measured three of the Big Five personality traits. It was later revised to include all five traits and renamed the NEO Personality Inventory (NEO PI). In this version, "NEO" was now considered part of the name of the test and was no longer an acronym. This naming convention continued with the third and latest version, the NEO PI-R.

A mnemonic device for the five primary factors is the acronym "OCEAN," or alternatively "CANOE".

History

In the 1970s, Costa and McCrae were researching how personality changed with age. Personality inventories were included in the batteries of assessments participants took in the Normative Aging Study. Costa and McCrae report that in looking at the competing factorially analyzed trait personality theories of the day, they noticed much more agreement at the level of the higher-order factors than at the lower order factors. Costa and McCrae report that they began by looking for the broad and agreed-upon traits of Neuroticism (N) and Extraversion (E), but factor analysis also led them to a third broad trait, Openness to
Experience (O). The first version of the NEO only included those three factors, and was included in the Augmented Baltimore Longitudinal Study of Aging.

From this data, Costa and McCrae recognized two more factors: Agreeableness (A) and Conscientiousness (C). They then published the first manual for the NEO, which included all five factors. The assessment also included six “facet” sub-scales for the three original factors (N, E, & O). As research began to accumulate that the five factors were adequately broad to be useful, there were also calls for a more detailed view of personality. In 1992 Costa and McCrae published a Revised NEO manual which included six facets for each factor (30 in total).

**Forms and Administration**

In the most recent publication, there are two forms for the NEO, one for self report (form S) and one for observer rating (form R). Both forms consist of 240 items (descriptions of behavior) answered on a five point scale, ranging from “strongly disagree” to “strongly agree”. Finally, there is a 60-item assessment of domains only called the “NEO FFI.” There are paper and computer versions of all forms available.

The manual reports that administration of the full version should take between 30 and 40 minutes. Costa and McCrae report that the assessment should not be evaluated if there are more than 40 items missing. They also state that despite the fact that the assessment is “balanced” to control for the effects of acquiescence and nay-saying, that if more than 150 responses, or less than 50 responses, are “agree” or “strongly agree,” the results should be interpreted with caution.

Scores can be reported to most test takers on “Your NEO Summary,” which provides a brief explanation of the assessment, and gives the participants’ domain levels and a strengths-based description of three levels (high, medium, and low) in each domain. For example, low N reads “Secure, hardy, and generally relaxed even under stressful conditions,” whereas high N reads “Sensitive, emotional, and prone to experience feelings that are upsetting.” For profile interpretation, Facet and Domain scores are reported in T Scores and are recorded visually as compared to the appropriate norm group, much like other measures of personality.

**Reliability of the NEO**

The internal consistency information of the NEO presented in the manual was derived from the full job performance sample (n= 1,539). The internal consistency of the NEO was high, at: N=.92, E=.89, O=.87, A=.86, C=.90. The internal consistency of the facet scales ranged from .56-.81, although Costa and McCrae remind us that there are only 8 items on each facet. A recent article discussing personality and eating disorders reported an internal consistency of .69-.90 for the NEO PI-R facets. For the NEO FFI (the 60 item domain only version) the internal consistencies reported in the manual were: N=.79, E=.79, O=.80, A=.75, C=.83. In the literature, the NEO FFI seems to be used as a whole more often, with investigators using the NEO PI-R usually using the items from just the domains they are
interested in. A recent article using the NEO FFI to study perfectionism had the internal consistencies at: N= .85, E=.80, O=.68, A=.75, C=.83.

The literature appears to support the internal consistencies listed in the manual, but more interestingly, the NEO has been translated and evaluated in many different languages and cultures. A translation of the NEO to be used in the Philippines has the internal consistency of the domain scores from .78-.90, with facet alphas having a median of .61. The NEO was the assessment used in a recent study which involved using self report measures in 49 different cultures to assess whether individuals’ perception of the “national character” of the culture accurately reflected the personality of the members of that culture (it did not).

Test retest reliability of the NEO PI-R is also good. The test retest reliability of an early version of the NEO after 3 months was: N= .87, E=.91, O=.86. The test retest reliability reported in the manual of the NEO PI-R over 6 years was: N= .83, E=.82, O=.83, A=.63, C=.79. Costa and McCrae point out that this not only shows good reliability of the domains, but also that they are stable over a long periods of time (past the age of 30), as the scores over 6 years are only marginally more different than the scores as measured a few months apart.

**Consistency**

A study of German twins found that the correlation between two peer-raters were 0.63 for NEO FFI neuroticism. Correlation between self-rated neuroticism and peer-rated neuroticism was 0.55.

**The effect of age on NEO PI-R**

The NEO PI-R traits are not necessarily stable across life. Based on cross-sectional and longitudinal studies researchers conclude that neuroticism and extraversion declines with age, whereas agreeableness and conscientiousness increase. A meta-analysis of 92 personality studies that used several different inventories (among them NEO PI-R) found that social dominance, conscientiousness, and emotional stability increased with age, especially in the age 20 to 40.

**Validity of the NEO**

Costa and McCrae report in the manual extensive information on the convergent and discriminate validity of the NEO.

- For the MBTI, Introversion is correlated with the NEO facet Warmth at -0.61, and with the NEO facet Gregariousness at -0.59. Intuition is correlated with the NEO facet Fantasy at 0.43 and with the NEO facet Aesthetics at 0.56. Feeling is correlated with the NEO facet Tender-mindedness at 0.39.
- For the MMPI (a personality inventory used in mental health), the Compulsive scale is correlated with the NEO facet Anxiety at 0.51, the Borderline scale is correlated with the NEO facet Angry hostility at 0.47, the Avoidant scale is correlated with the
NEO facet of Self-consciousness at 0.58, and the Schizoid scale is correlated with the NEO facet Gregariousness at 0.66.

- For the Self-Directed Search (a personality inventory developed by John L. Holland for careers work), Artistic is correlated with the NEO facet Aesthetic at 0.56, Investigative is correlated with the NEO facet Ideas at 0.43, and Social is correlated with the NEO facet Tender-mindedness at 0.36.

In terms of criterion validity there have been the following recent studies. Conard, 2005, found that Conscientiousness significantly predicted the GPA of college students, over and above using SAT scores alone. Cano-Garcia and his two colleagues in 2005 correlated a Spanish version of the NEO to predictors of teacher burnout in Sevilla, Spain. Neuroticism was related to the “emotional exhaustion” factor of burnout at 0.44, and Agreeableness related to the “personal accomplishment” factor of burnout (which is negatively scored when predicting burnout) at 0.36. Wang, Jome, Haase, & Bruch, in 2006, found that in and minority students Extraversion was correlated to Career Decision Making Self-Efficacy (CDMSE) at 0.30, and that Neuroticism was strongly related to Career Commitment while controlling for CDMSE (r=0.42). Finally, Korukonda reported in 2007 that Neuroticism was positively related to computer anxiety, while Openness and Agreeableness was negatively related.

**NEO-FFI: the shortened version**

A cut-down version of NEO PI-R exists called the NEO Five-Factor Inventory (NEO-FFI) with 60 items and designed to take 10-15 rather than 45–60 minutes to administer. This test was revised in 2004.

**Cross-Cultural Research on NEO-PI-R**

Cross-cultural stability of an instrument can be considered evidence of its validity. A huge amount of cross-cultural research has been carried out on the Five-Factor Model of Personality by utilizing the NEO-PI-R and the shorter version, the NEO-FFI. McCrae and Allik (2002) have presented a collection of selected invited papers from various researchers across the globe covering various issues in cross-cultural research on the FFM. This volume has also presented data about the FFM from several cultures. The robustness of the FFM has been proven across different cultures; for example, Chinese (McCrae, Costa, & Yik, 1996; Yik & Bond, 1993), Estonian & Finnish (Pulver, Allik, Pulkkinen, & Hämäläinen, 1995), Filipino and French (McCrae, Costa, del Pilar, Rolland, & Parker, 1998), India (Lodhi, Deo, & Belhekar, 2002), Portuguese (Lima, 2002), Russian (Martin, Oryol, Rukavishnikov, & Senin, 2000), South Korean (Piedmont & Chae, 1997), Turkish (Gülgöz, 2002), Vietnamese (Leininger, 2002), sub-Saharan cultures like Zimbabwe (Piedmont, Bain, McCrae, & Costa, 2002), etc. Angleitner and Ostendorf (2000) presented the evidence for robustness of the FFM in German speaking countries like Austria, former East and West Germany, and Switzerland. Rolland (2000), on the basis of the data from sixteen cultures, asserted that the neuroticism, openness, and conscientiousness dimensions are cross-culturally valid. Rolland further states that extraversion and agreeableness dimensions that are components of interpersonal circumplex are more sensitive to cultural context.
Costa, Lima, Simões, Ostendorf, Angleitner, Marušić, Bratko, Caprara, Barbaranelli, Chae, and Piedmont (1999) showed that the age differences in the five-factors of personality across the adult life span are parallel in samples from Germany, Italy, Portugal, Croatia and South Korea. McCrae (2001) examined the data from 26 cultures and showed that the age and gender differences resembled those found in the American sample. The intercultural factor analysis yielded a close approximation to the five-factor model and the factor scores were meaningfully related to other cultural level variables. McCrae (2002) extended earlier data to 36 cultures and the analysis of age and gender differences, the generalizability of culture profiles across gender and age groups, and culture level factor structure and correlates were replicated. McCrae, Terracciano et al. (2005) further reported data from 51 cultures and presented findings that supported the rough scalar equivalence of NEO-PI-R five factors and facets across cultures, suggesting that aggregate personality profiles provide insight into cultural differences.

**Brain and genetics**

The NEO PI-R has been used in numerous research studies that investigate a link between genotype and personality or brain and personality — as in the competing personality inventory of C. Robert Cloninger. Such studies are not always conclusive; for example, one study found some evidence for an association between NEO PI-R facets and polymorphism in the tyrosine hydroxylase gene, while another study reported that they could not confirm the finding.

In a classic study published in Science in 1996, a relationship between the serotonin transporter gene regulatory region (5-HTTLPR) and the neuroticism subscale was found. Individuals with a shorter allele version had higher neuroticism scores. The effect was significant for heterozygotes and even stronger for people homozygous for the allele. Although this is an important finding, this specific gene only contributes 4% of the overt variation in the neuroticism trait, and only 8% of the genetic variation. The authors conclude that "if other genes were hypothesized to contribute similar gene dosage effects to anxiety, approximately 10 to 15 genes might be predicted to be involved."

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**Forte Communication Style Profile**

The Forté Profile is a quantitatively validated communication style profiling instrument. A Forté profile identifies a person’s natural communication style preferences and strengths, how they have been adapting to a specific individual, team and/or environment, and how they are most likely coming across to others. Forté also identifies an individual’s current logic style, current stamina level, and current feelings about goal attainment.
History

Forte was established by CD Morgan III in 1978.

Early research into lexical theory (of or relating to words or the vocabulary of a language as distinguished from its grammar and construction) was done by Galton, (1884) and suggested that personality traits are captured in the words that people use to describe one another. This work eventually led to the Cattel16PF personality profile instrument. This approach has then been basic to the construction of other instruments, including Forté, PI, Big Five, etc.

In the mid 1970's, Morgan reviewed over 200 instruments seeking a strengths-based survey and report. None existed. Morgan began with 185 words or descriptors known to be reflective of the communication styles of dominance, extroversion, patience and conformity based upon his (C. D. Morgan III (1978–1983)) and the earlier works of Thurstone (1934); Cattell (1950); Guilford (1954); Daniels (1973); and Horst (1968).

In Morgan’s early experimental administrations of the list, the respondents, as they are today, were asked to respond to each adjective based on the 5-point Likert scale under two separate perceptions – “basic self” and “self as others expect me to be”. The 185 descriptors were reduced 30. Using this process provided the position to allocate equivalents with equal loadings to each environment – primary and adapting.

As much of the research focused on the respondent’s reaction to words classified as adjectives or descriptors, survey efficiency evolved. Accuracy was proven following the criteria of: validation (construct, content, concurrent, and predictive), reliability (test and retest), structural invariance, trait intercorrelations, and intrinsic/extrinsic validity. Continuing field testing procedures are used to refine the wording and uses of the instrument.

Communication style analysis determines, independently, the isolated reactive value of an adjective or descriptor. The next step was to identify a grouping of like-reactive value adjectives or descriptors (i.e. called primary trait loading) and determining what they signify. From the studies of L.L. Thurstone, R.B. Cattell, J.P. and R.B. Guilford, D.W. Fiske, P. Horst (1968) , C.D. Morgan III (1978–1983) and Morgan’s research accomplished in the decade of the 1970s a grouping of reactive-value adjectives or descriptors were identified as all evidencing high style loadings for each of the primary styles of the tool or instrument. The system of measuring styles obtained from three points of view (i.e. self, adapting environment(s), and how the individual is perceived by others) was further improved by developing a multiple complexity communication style analysis.

This is, simply, the cluster-sample technique. A sample is taken from identified strength clusters, which allows the computer to project the actual communication/behaviour profile. The Forté survey card is a simulated environment of the real world. The individual taking the survey does not need to understand all the words, as the words are stimuli, to trigger reaction. A sampling, then, has meaning when properly computed.
The field case studies helped describe the behaviour of individuals with similar responses to trait clusters. The system determined the type of and degree of behaviour. Trait intensity was measured. Variance was determined. The Forté processes and software are updated every six (6) months, reflecting enhancements from both self-perception and observed behaviour validations. Forté is unique in its mathematical weighing of each descriptor, then further intensifying each trait with specific, individual reaction values for the corresponding Likert Scale (1 to 5).

Systematic tracking of self-descriptive data from large groups of people reveals certain consistencies in response patterns. These consistencies can be considered dimensions along which persons array themselves at defined positions. Such dimensions can be defined as “Introversion-Extroversion,” as presented in the independent research of Cattell (1950) and Eysenck (1947). This communication style was originally described in the theories of the Swiss physician and psychologist C.G. Jung. Forté has refined such dimensions to communication style versus “personality” traits.

Communication style dimensions can be used to locate a communication style space within which individuals locate themselves at particular points. Both Cattell and Eysenck found evidence of a two-dimensional space. Cattell even employs as many as 16 “factor” or style dimensions. Forté identifies over 250,000 profile dimensions via the primary, current adapting and perceiver profiles. Current logic, stamina and goals index data is also provided.

### Millon Clinical Multiaxial Inventory

The Millon Clinical Multiaxial Inventory-III (MCMI-III) is a psychological assessment tool intended to provide information on psychopathology, including specific disorders outlined in the DSM-IV. It is intended for adults (18 and over) with at least an 8th grade reading level. The MCMI was developed and standardized specifically on clinical populations (i.e. patients in psychiatric hospitals or people with existing mental health problems), and the authors are very specific that it should not be used with the general population. However, there is a strong evidence base that shows that it still retains validity on non-clinical populations, and so psychologists will often administer the test to members of the general population.

It is composed of 175 true-false questions that reportedly takes 25-30 minutes to complete. It was created by Theodore Millon, Carrie Millon, Roger Davis, and Seth Grossman.

**The test is modeled on four scales**

- 14 Personality Disorder Scales
- 10 Clinical Syndrome Scales
- 5 Correction Scales: 3 Modifying Indices (which determine the patient's response style and can detect random responding); 2 Random Response Indicators
- **42 Grossman Personality Facet Scales** (based on Seth Grossman's theories of personality and psychopathology)

The test was normed on a sample of 998 male and female adults with a wide variety of clinical disorders.

**Scoring system**

Patients’ raw scores are converted to Base Rate (BR) scores to allow comparison between the personality indices. The Base Rate scores are essentially where each score fits on a scale of 1-115, with 60 being the median score. Conversion to a Base Rate score is relatively complex, and there are certain corrections that are administered based on each patient’s response style.

The Modifying indices are scored using a complex system in which the patient’s responses in the other scales are compared and the raw and BR scores are taken from this. The Validity index is an exception to this. It consists of three questions, and so is scored between 0 and 3. It is not converted to a BR score.

**Interpretation**

The modifying indices consist of 4 scales - the Validity scale (V), the Disclosure Scale (X), the Desirability Scale (Y) and the Debasement Scale (Z).

They are used to determine a patient’s response style, such as whether they were keen to present themselves in a positive light (indicated by an elevation on the Desirability scale) or exaggerate the negative aspects of themselves (indicated by the Debasement scale). It also is used to measure whether the patient was open in the assessment, or if they were unwilling to disclose details about themselves (the Disclosure Scale). These are compared against each other to gain an understanding of the patient’s response style. For instance, elevated scores on the Disclosure and Desirability scales suggest a "cry for help" response style.

The Disclosure scale is the only scale in the MCM-I-III in which the raw scores are interpreted and in which a particularly low score is clinically relevant. A raw score above 178 or below 34 is considered to not be an accurate representation of the patient's personality style as they either over- or under-disclosed.

The Validity Index consists of just three questions in which a response of "True" is extremely unlikely, such as "I was on the front cover of several magazines last year." While only consisting of 3 questions, the scale is very sensitive to random responding. A score of 2 or 3 on this scale would render the test invalid.

For the Personality and Clinical Syndrome scales, scores of 75-84 are taken to indicate personality trait, or (for the Clinical Syndromes scales) the presence of a clinical syndrome. Scores of 85 or above indicate the persistence of a personality trait or a clinical syndrome.
Eysenck Personality Questionnaire

In psychology, Eysenck Personality Questionnaire (EPQ) is a questionnaire to assess the personality traits of a person. It was devised by the psychologists Hans Jürgen Eysenck and his wife Sybil B. G. Eysenck.

Hans Eysenck's theory is based primarily on physiology and genetics. Although he was a behaviorist who considered learned habits of great importance, he considers personality differences as growing out of our genetic inheritance. He is, therefore, primarily interested in what is usually called temperament.

Temperament is that aspect of our personalities that is genetically based, inborn, there from birth or even before. That does not mean that a temperament theory says we don't also have aspects of our personality that are learned, it's just that Eysenck focused on "nature," and left "nurture" to other theorists.

**Dimensions**

Eysenck initially conceptualized personality as two, biologically-based independent dimensions of temperament:

**Extraversion/Introversion**: Extroversion is characterized by being outgoing, talkative, high on positive affect (feeling good), and in need of external stimulation. According to Eysenck's arousal theory of extraversion, there is an optimal level of cortical arousal, and performance deteriorates as one becomes more or less aroused than this optimal level. Arousal can be measured by skin conductance, brain waves or sweating. At very low and very high levels of arousal, performance is low, but at a better mid-level of arousal, performance is maximized. Extraverts, according to Eysenck's theory, are chronically under-aroused and bored and are therefore in need of external stimulation to bring them up to an optimal level of performance. Introverts, on the other hand, are chronically over-aroused and jittery and are therefore in need of peace and quiet to bring them up to an optimal level of performance.

**Neuroticism/Stability**: Neuroticism or emotionality is characterized by high levels of negative affect such as depression and anxiety. Neuroticism, according to Eysenck's theory, is based on activation thresholds in the sympathetic nervous system or visceral brain. This is the part of the brain that is responsible for the fight-or-flight response in the face of danger. Activation can be measured by heart rate, blood pressure, cold hands, sweating and muscular tension (especially in the forehead). Neurotic people, who have low activation thresholds, and unable to inhibit or control their emotional reactions, experience negative affect (fight-or-flight) in the face of very minor stressors - they are easily nervous or upset. Emotionally stable people, who have high activation thresholds and good emotional control, experience negative affect only in the face of very major stressors - they are calm and collected under pressure.
The two dimensions or axes, extraversion-introversion and emotional stability-instability, define four quadrants. These are made up of:

- **Stable extraverts** (sanguine qualities such as - outgoing, talkative, responsive, easygoing, lively, carefree, leadership)
- **Unstable extraverts** (choleric qualities such as - touchy, restless, excitable, changeable, impulsive, irresponsible)
- **Stable introverts** (phlegmatic qualities such as - calm, even-tempered, reliable, controlled, peaceful, thoughtful, careful, passive)
- **Unstable introverts** (melancholic qualities such as - quiet, reserved, pessimistic, sober, rigid, anxious, moody).

Further research demonstrated the need for a third category of temperament:

Psychoticism/Socialisation : Psychoticism is associated not only with the liability to have a psychotic episode (or break with reality), but also with aggression. Psychotic behavior is rooted in the characteristics of toughmindedness, non-conformity, inconsideration, recklessness, hostility, anger and impulsiveness. The physiological basis suggested by Eysenck for psychoticism is testosterone, with higher levels of psychoticism associated with higher levels of testosterone.

The following table describes the traits that are associated with the three temperaments in Eysenck's model of personality:

<table>
<thead>
<tr>
<th>Psychoticism</th>
<th>Extraversion</th>
<th>Neuroticism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
<td>Sociable</td>
<td>Anxious</td>
</tr>
<tr>
<td>Assertive</td>
<td>Irresponsible</td>
<td>Depressed</td>
</tr>
<tr>
<td>Egocentric</td>
<td>Dominant</td>
<td>Guilt Feelings</td>
</tr>
<tr>
<td>Unsympathetic</td>
<td>Lack of reflection</td>
<td>Low self-esteem</td>
</tr>
<tr>
<td>Manipulative</td>
<td>Sensation-seeking</td>
<td>Tense</td>
</tr>
<tr>
<td>Achievement-oriented</td>
<td>Impulsive</td>
<td>Moody</td>
</tr>
<tr>
<td>Dogmatic</td>
<td>Risk-taking</td>
<td>Hypochondriac</td>
</tr>
<tr>
<td>Masculine</td>
<td>Expressive</td>
<td>Lack of autonomy</td>
</tr>
<tr>
<td>Tough-minded</td>
<td>Active</td>
<td>Obsessive</td>
</tr>
</tbody>
</table>

EPQ has a fourth scale, the Lie (L) scale.

**Validation**

The EPQ is a reliable research tool that is validated by criterion analysis. Disadvantages of the questionnaire are that it asks yes/no questions which forces a sometimes inaccurate response, and it can be psychometrically inferior.

**Versions**
EPQ also exists in Finnish and Turkish versions.

In 1985 a revised version of EPQ was described—the EPQ-R—with a publication in the journal Personality and Individual Differences. This version has 100 yes/no questions in its full version and 48 yes/no questions in its short scale version. A different approach to personality measurement developed by Eysenck, which distinguishes between different facets of these traits, is the [Eysenck Personality Profiler].

**Swedish Universities Scales of Personality**

Swedish Universities Scales of Personality (SSP) is a personality test based on the older Karolinska Scales of Personality (KSP). It is originally in Swedish but has been translated to English. The personality profile is presented in t-score (mean 50 and standard deviation 10). Both the SSP questionnaire and the scoring algorithm is free of charge.

**Personality dimensions**

SSP includes 91 items and yields 13 personality scales:

- Somatic trait anxiety
- Psychic trait anxiety
- Stress susceptibility
- Lack of ascertiveness
- Impulsiveness
- Adventure Seeking
- Detachment
- Social Desirability
- Embitterment
- Trait Irritability
- Mistrust
- Verbal trait aggression
- Physical trait aggression

**Enneagram of Personality**

The Enneagram of Personality (or simply the Enneagram, from the Greek words ennea [nine] and grammos [something written or drawn]) is a typology of human personality. Principally developed by Oscar Ichazo and Claudio Naranjo, it is also partly based on earlier teachings of G. I. Gurdjieff. The typology defines nine personality types (also called "enneatypes"), which are also indicated by the points of a geometric figure, called an enneagram, which also indicate some of the connections between the types. As there are different schools of thought among Enneagram theorists about some aspects of how it is understood, its interpretation is not always unified or consistent.
The Enneagram of Personality is not a typology that is commonly taught or researched in academic psychology. It has been widely promoted in both business management and spiritual contexts through seminars, conferences, books, magazines and DVDs. In business contexts it is generally used as a typology to gain insights into workplace dynamics; in spirituality it is more commonly presented as a path to higher states of being, essence and enlightenment. It has been described as a method for self-understanding and self-development but has been criticized as being subject to interpretation, making it difficult to test or validate scientifically.

History

G. I. Gurdjieff is credited with introducing the enneagram figure to the West. He did not, however, develop the nine personality types associated with the Enneagram. Oscar Ichazo is generally recognized as the principal source of the contemporary Enneagram of Personality. Ichazo’s "Enneagon of Ego Fixations", together with a number of other dimensions of personality mapped on the enneagram figure, forms the basis of the Enneagram of Personality. Bolivian-born Ichazo began teaching programs of self-development in the 1950s. His teaching, which he calls "Protoanalysis", uses the enneagram figure among many other symbols and ideas. Ichazo founded the Arica Institute which was originally based in Chile before moving to the United States and coined the term "Enneagram of Personality".

Claudio Naranjo is a Chilean-born psychiatrist who first learned the Enneagram from Ichazo at a course in Arica, Chile. He then began developing and teaching his own understanding of the Enneagram in the United States in the early 1970s, influencing others, including some Jesuit priests who adapted the Enneagram for use in Christian spirituality. Naranjo’s student Helen Palmer has written a number of books that focused the Enneagram on self-analysis, family and workplace relationships. There is no unified school of thought among proponents regarding the interpretation or use of the Enneagram personality types. Ichazo disowned Naranjo, Palmer and the Jesuits on what he felt were misinterpretations and uses of the Enneagram, however even within Naranjo’s group of followers there are differing interpretations of the nine types. Various other authors, including Richard Rohr, Elizabeth Wagele and Don Richard Riso, also began publishing widely-read books on the Enneagram of Personality in the 1980s and 1990s.

Enneagram figure

The enneagram figure is usually composed of three parts; a circle, an inner triangle (connecting 3-6-9) and an irregular hexagonal "periodic figure" (connecting 1-4-2-8-5-7). According to esoteric spiritual traditions, the circle symbolizes unity, the inner triangle symbolizes the "law of three" and the hexagon represents the "law of seven" (because 1-4-2-8-5-7-1 is the repeating decimal created by dividing one by seven in base 10 arithmetic). These three elements constitute the enneagram figure.

Nine types
The table below gives the principal characteristics of the nine types along with their basic relationships. This table is based on Understanding the Enneagram: The Practical Guide to Personality Types (revised edition) by Don Richard Riso and Russ Hudson. Other theorists may disagree on some aspects. The types are normally referred to by their numbers but sometimes their "characteristic roles" (which refers to distinctive archetypal characteristics) are used instead. The "stress" and "security" points (sometimes referred to as the "disintegration" and "integration" points) are the types, connected by the lines of the enneagram figure, that it is believed a person may be particularly influenced by in more adverse or relaxed circumstances. According to theory, someone classed as a One type, for example, may begin to think, feel and act more like a Four type when stressed, or more like a Seven type when relaxed.

<table>
<thead>
<tr>
<th>Type</th>
<th>Characteristic role</th>
<th>Ego fixation</th>
<th>Holy idea</th>
<th>Basic fear</th>
<th>Basic desire</th>
<th>Temptation</th>
<th>Vice/Passion</th>
<th>Virtue</th>
<th>Stress</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Referee</td>
<td>Resentment</td>
<td>Perfection</td>
<td>Corruption, evil</td>
<td>Goodness, integrity, balance</td>
<td>Hypocrisy, hypochondriasis</td>
<td>Anger</td>
<td>Right action</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Helper</td>
<td>Flattery</td>
<td>Freedom</td>
<td>Unworthiness of love</td>
<td>Unconditional Love</td>
<td>Manipulativeness</td>
<td>Vandalism</td>
<td>Altruism</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Achiever</td>
<td>Vanity</td>
<td>Hope</td>
<td>Worthlessness</td>
<td>Value to others</td>
<td>Pleasing everybody</td>
<td>Decoy</td>
<td>Truthfulness</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Individualist</td>
<td>Melancholy</td>
<td>Origin</td>
<td>Commonness</td>
<td>Uniqueness, authenticity</td>
<td>Self-destruction, withdrawal</td>
<td>Envy</td>
<td>Equanimity</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Investigator</td>
<td>Stinginess</td>
<td>Omniscience</td>
<td>Uselessness, helplessness</td>
<td>Competency</td>
<td>Overthinking</td>
<td>Avarice</td>
<td>Detachment</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>Loyalist</td>
<td>Cowardice</td>
<td>Faith</td>
<td>Isolation and vulnerability</td>
<td>Safety</td>
<td>Suspiciousness</td>
<td>Fear</td>
<td>Courage</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>Enthusiast</td>
<td>Planning</td>
<td>Work</td>
<td>Boredom</td>
<td>Experience of life</td>
<td>Moving too fast</td>
<td>Gluttony</td>
<td>Sobriety</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Challenger</td>
<td>Vengeance</td>
<td>Truth</td>
<td>Loss of control</td>
<td>Self-protection, autonomy</td>
<td>Self-sufficiency</td>
<td>Lust</td>
<td>Magnanimity</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Peacemaker</td>
<td>Indolence, self-forgetting</td>
<td>Love</td>
<td>Loss, annihilation</td>
<td>Stability, peace of mind</td>
<td>Giving in</td>
<td>Indifference</td>
<td>Serenity</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

Wings

Most, but not all, Enneagram of Personality theorists teach that a person's basic type is modified, at least to some extent, by the personality dynamics of the two adjacent types as indicated on the enneagram figure. These two types are often called "wings". A person of the Three personality type, for example, is understood to have points Two and Four as their wing types. The circle of the enneagram figure may indicate that the types or points exist on a spectrum rather than as distinct types or points unrelated to those adjacent to them. A person may be understood, therefore, to have a core type and one or two wing types that influence but do not change the core type.

Stress and security points

The lines between the points add further meaning to the information provided by the descriptions of the types. Sometimes called the "security" and "stress" points, or points of "integration" and "disintegration", these connected points also contribute to a person's overall personality. There are, therefore, at least four other points that can significantly affect a person's core personality; the two points connected by the lines to the core type and the two wing points.
Instinctual subtypes

Each of the personality types are usually understood as having three subtypes. These three subtypes are believed to be formed according to which one of three instinctual energies of a person is dominantly developed and expressed. The instinctual energies are usually called "self-preservation", "sexual" (also called "intimacy" or "one-to-one") and "social". On the instinctual level, people may internally stress and externally express the need to protect themselves (self-preservation), to connect with important others or partners (sexual), or to get along or succeed in groups (social). From this perspective, there are 27 distinct personality patterns, because people of each of the nine types also express themselves as one of the three subtypes. An alternative approach to the subtypes looks at them as three domains or clusters of instincts that result in increased probability of survival (the "preserving" domain), increased skill in navigating the social environment (the "navigating" domain) and increased likelihood of reproductive success (the "transmitting" domain). From this understanding the subtypes reflect individual differences in the presence of these three separate clusters of instincts.

It is generally believed that people function in all three forms of instinctual energies but that one usually dominates. According to some theorists another instinct may also be well-developed and the third often markedly less developed.