Wilhelm Wundt

(1832-1920)
German Philosopher & Psychologist

Influences

- Student of:
- Influenced by:
- Students: J. M. Cattell, Titchener, Spearman
- Influenced:
- Time Period: The Great Schools

Education

- Tubingen University (1851)
- University of Heidelberg (M.D., 1856)

Career

- Privatdozent in the Physiological (1857-1864)
- Professor of Inductive Philosophy at Zurich University (1874)
- Professor of Inductive Philosophy at Leipzig University (1875-1917)
- Established the world's first experimental laboratory in psychology, the Institut fur Experimentelle Psychologie (1879)

Major Contributions

- Often referred to as the "Father of Experimental Psychology" and the "Founder of Modern Psychology"

Ideas and Interests

Wundt established the first laboratory in the world dedicated to experimental psychology. This laboratory became a focus for those with a serious interest in psychology, first for German philosophers and psychology students, then for American and British students as well. All subsequent psychological laboratories were closely modeled in their early years on the Wundt model.

Wundt's revolutionary approach to psychological experimentation moved psychological study from the domain of philosophy and the natural sciences and began to utilize physiological experimental techniques in the laboratory. To Wundt, the essence of all total adjustments of the organism was a psychophysical process, an organic response mediated by both the physiological and the psychological. He pioneered the concept of stating mental events in relation to objectively knowable and measurable stimuli and reactions. Wundt perceived psychology as part of an elaborate philosophy where mind is seen as an activity, not a substance. The basic mental activity was designated by Wundt as 'apperception'.

Physiological psychology was concerned with the process of excitations from stimulation of the sense organs, through sensory neurons to the lower and higher brain centers, and from these centers to the muscles. Parallel with this process ran the events of mental life, known through introspection. Introspection became, for Wundt, the

primary tool of experimental psychology. In Wundt's 1893 edition of *Physiological Psychology*, he published the 'tridimensional theory of feeling': feelings were classified as pleasant or unpleasant, tense or relaxed, excited or depressed. A given feeling might be at the same time a combination of one of each of the categories.

Wundt's method of introspection did not remain a fundamental tool of psychological experimentation past the early 1920's. His greatest contribution was to show that psychology could be a valid experimental science. His influence in promoting psychology as a science was enormous. Despite poor eyesight, Wundt, it has been estimated, published 53,000 pages, enough to stock a complete library.

As noted above, a primary preoccupation of many early psychologists, such as Wundt and Fechner, was with the measurement of powers of sensory discrimination, resulting in the theory and methodology of psychophysics, the science of quantitative relations between physical magnitudes and sensations. This interest with measurements led Wundt to develop what would be the foundation for Binet's scale of intelligence. Binet had developed a scale where specific tasks were directly correlated to different levels of abilities or a mental age. However, Binet was not suggesting that each task would correspond exactly and reliably to a particular mental level. As the scale developed, Binet found it necessary to use a number of tasks at each level to determine mental age. At this point, the task of determining a person's mental age was reminiscent of one of the psychophysical methods developed by Wundt to determine the level of a person's sensitivity to faint stimuli or to small physical differences in stimuli.

Publications

- Vorlesungen uber die Menschen und Tier-Seele (1863, English translation, Lectures on Human and Animal Psychology, 1896)
- Grundzuge der physiologeschen Psychologie (1874, English translation, Principles of Physiological Psychology, 1904).
- Philosophische Studien, the first journal of psychology (1871)
- Volkerpsychologie (social psychology), (10 vols, 1911-1920)

References: 3, 10, 37

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Classics in the History of Psychology

An internet resource developed by
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Introduction to

The Principles of Psychology
William James (1890)

Robert H. Wozniak

William James's *The Principles of Psychology*[1] is widely considered to be the most important text in the history of modern psychology. Twelve years in the writing,[2] *The Principles* was, and in many ways still is, a document unique in the history of human thought. It's author was not only completely conversant with the psychological literature in English, but with that in French, German, and Italian; and, as a result, *The Principles* presented the discipline for the first time as a truly international endeavor. James was also an artist, with the artist's eye for shading and detail, and one of the English language's truly great prose stylists.[3] In *The Principles* these characteristics combined to yield some of the richest descriptions of human experience, human behavior, and human nature ever to appear in a work of non-fiction.

As a psychologist, James was as interested in and knowledgeable about the phenomena of psychopathology and exceptional mental states as he was in those of normal consciousness; and in *The Principles* he drew constantly from this material to enrich his analyses. Trained as a biologist and a physician, James felt compelled to ground his psychology wherever possible in the facts of nervous physiology; but he was also at heart a philosopher concerned with issues such as the problem of other minds, the relationship of mind to body, the continuity of self, the mechanism of objective reference, and the nature of necessary truths. In *The Principles*, both of these orientations were manifest, as James moved effortlessly back and forth from one level of analysis to another.

More important than any of these characteristics for the claim of James's text to uniqueness and for its extraordinary and continuing influence was the exceptionally innovative way in which the subject matter of psychology was approached. The more traditional topics (e.g., the functions of the nervous system, sensation, the perception of time, space, objects, and reality, imagination, conception, reasoning, memory, association, attention, emotions, and will) were rarely dealt with in a traditional manner; and a whole series of non-traditional topics (e.g., habit, the stream of thought, consciousness of self, discrimination and comparison, the production of movement, instinct, and hypnotism) were introduced in ways that forever changed the discipline.

Not surprisingly *The Principles* can still be read in its entirety with great profit.[4] Of all James's contributions, however, there are three for which he has been especially famous in the history of psychology: his analysis of the stream of thought, his characterization of the self, and his theory of emotion. Each of these will be briefly described; but it should be kept in mind that, with James, there is no substitute for reading the original.

James's analysis of the stream of thought was first published in an article in *Mind*, entitled 'On some omissions of introspective psychology.'[5] As it appeared in edited form in *The Principles*, it consisted of a number of

components. Three of these, all of which flowed directly from James's recognition that psychology had traditionally attributed to thought a characteristic true only of the objects of thought(viz., analyzability into discrete elements), will be addressed here.

The first of these components was an attack on the idea that sensations constituted the fundamental elements of consciousness. Sensation, James argued, was an abstraction from not a fact of experience. 'No one,' he wrote, 'ever had a simple sensation by itself. Consciousness, from our natal day, is of a teeming multiplicity of objects and relations, and what we call simple sensations are results of discriminative attention, pushed often to a very high degree.'[6]

The two remaining components emphasized change and continuity in thought. For James, thought contained no constant elements of any kind, be they sensations or ideas. Every perception was relative and contextualized, every thought occurred in a mind modified by every previous thought. States of mind were never repeated. Objects might be constant and discrete, but thought was constantly changing and sensibly continuous. 'Consciousness,' he wrote, '...does not appear to itself chopped up in bits. Such words as 'chain' or 'train' do not describe it fitly as it presents itself in the first instance. It is nothing jointed; it flows. A 'river' or 'stream' are the metaphors by which it is most naturally described.'[7]

James's chapter on the self introduced numerous self-related concepts and distinctions into psychology.[8] The phenomenal self (the experienced self, the 'me' self, the self as known) was distinguished from the self thought (the I-self, the self as knower). 'Personality,' he wrote, 'implies the incessant presence of two elements, an objective person, known by a passing subjective Thought and recognized as continuing in time. *Hereafter let us use the words ME and I for the empirical person and the judging Thought.*'[9]

In discussing the me-self, James wrote of three different but interrelated aspects of self: the material self (all those aspects of material existence in which we feel a strong sense of ownership, our bodies, our families, our possessions), the social self (our felt social relations), and the spiritual self (our feelings of our own subjectivity). These aspects were then treated in terms of relevant feelings of self-worth and self-seeking actions; and in the course of this analysis, James made three major contributions to self theory. He articulated the principle of multiplicity of social selves (*'a man has as many social selves as there are individuals who recognize him and carry an image of him in their mind*'[10]), defined self-esteem in terms of the ratio of successes to pretensions, arguing that self-esteem can be as easily increased by lowering aspirations as by increasing successes, and distinguished ideal selves from real selves (*'In each kind of self, material, social, and spiritual men distinguish between the immediate and actual, and the remote and potential...*'[11]).

In addressing the I-self, James turned first to the feeling of self identity, the experience that *'I am the same self that I was yesterday*,'[12] pointing out that *'the sense of our own personal identity...is exactly like any one of our other perceptions of sameness among phenomena.*'[13] He then proceeded to review the classical (spiritualist, associationist, and transcendentalist) theories of personal identity and concluded with an extremely important discussion of the phenomena and implications of multiple personality. In this last especially, we see James in his element, struggling with the nature of the most complex manifestations of the self.

Finally, James's chapter on the emotions, revised from an 1884 paper,[14] presented his famous theory of emotion. The chapter began with a clear recognition of the close relationship between action and the expressive and physiological concomitants of emotion 'Objects of rage, love, fear, etc.,' he wrote, 'not only prompt a man to outward deeds, but provoke characteristic alterations in his attitude and visage, and affect his breathing, circulation, and other organic functions in specific ways.'[15] Here James also made it clear that emotion could be as easily triggered by memory or imagination as by direct perception of an emotion producing event. As he phrased it, 'One may get angrier in thinking over one's insult than at the moment of receiving it.'[16]

In what was to become known as the James-Lange theory of emotion,[17] James then went on the argue that emotion consists of our experience of these bodily changes. As he put it, 'My theory...is that *the bodily changes follow directly the perception of the exciting fact, and that our feeling of the same changes as they occur is the emotion*...we feel sorry because we cry, angry because we strike, afraid because we tremble, and not that we cry, strike, or tremble, because we are sorry, angry, or fearful, as the case may be.'[18] Although James may have

been a bit overstrong in equating emotion with experience of bodily change (and in other sections of the chapter made claims in relation to the neural basis of emotion that have not been supported),[19] his description of the nature of emotion anticipated much of what is commonly held by modern theorists to be characteristic of emotion: the presence of an external or internal precipitating event, physiological change, expressive movement, and a characteristic affective experience.

It is impossible in brief to summarize the many ways in which James's *Principles*, read and assimilated by those coming to academic maturity in the decades following its publication, altered the course of development of the newly emerging scientific psychology. James's views, especially those on the stream of consciousness, played a major role in shifting psychology away from elementalism toward a functional, process oriented account of mind (and eventually behavior). James's concern with emotion, motivation, and the nature of the self, the social self, and self-esteem, not only lay the groundwork for dynamic psychology, but for a dynamic psychology that recognized the importance of social factors in personality. And James's deep and abiding concern with exceptional mental states helped legitimize an emerging, indigenous American psychotherapy and pave the way for the eventual acceptance of psychoanalysis within psychology.[20]

Footnotes

[1] James's dates are 1842-1910; for general biographical information on James, see Allen, G.W. (1967). *William James*. New York: Viking Press; for biographical information presented in the context of portions of James's extensive correspondence, see Perry, R.B. (1935). *The Thought and Character of William James* (2 vols.). Boston: Little, Brown. The work under discussion here was first published as: James, W. (1890). *The Principles of Psychology* (2 vols.). New York: Henry Holt (Reprinted Bristol: Thoemmes Press, 1999).

[2] James signed a contract for the book with Holt in 1878. In the 12 years between signing of the contract and the book's appearance, James published sixteen articles on which he drew extensively in writing the *Principles*.

[3] It has frequently been said of the James brothers that Henry James was a novelist who was really a psychologist and William a psychologist who was really a novelist.

[4] Almost the only discussions in the *Principles* that appear truly dated are those devoted to the specifics of nervous structure and function. The more properly psychological analyses can still be mined for insight into the nature of human mental function. For multiple examples of the continuing value of James's work in this regard, see Johnson, M.G. & Henley, T.B. (Eds.). (1990). *Reflections on "The Principles of Psychology." William James After a Century.* Hillsdale, NJ: Erlbaum.

[5] James, W. (1884a). On some omissions of introspective psychology. *Mind*, *9*, 1-26.

[6] James (1890), op. cit., Vol. 1, p. 224.

[7] Ibid., p. 239.

[8] For an excellent and more in-depth discussion of James's self theory, see Leary, D.E. (1990). William James on the self and personality: Clearing the ground for subsequent theorists, researchers, and practitioners. In M.G. Johnson & T.B. Henley (Eds.), op. cit., pp. 101-37.

[9] James (1890), op. cit., Vol. 1, p. 371.

[10] Ibid., p. 294.

[11] Ibid., p. 315.

[12] Ibid., p. 332

[13] Ibid., p. 334.

Personality Theories

SIGMUND FREUD

1856 - 1939

Dr. C. George Boeree

It is a mistake to believe that a science consists in nothing but conclusively proved propositions, and it is unjust to demand that it should. It is a demand only made by those who feel a craving for authority in some form and a need to replace the religious catechism by something else, even if it be a scientific one. Science in its catechism has but few apodictic precepts; it consists mainly of statements which it has developed to varying degrees of probability. The capacity to be content with these approximations to certainty and the ability to carry on constructive work despite the lack of final confirmation are actually a mark of the scientific habit of mind. -- Freud

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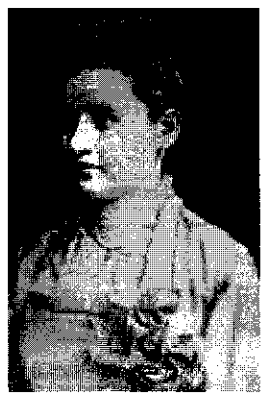


Freud's story, like most people's stories, begins with others. In his case those others were his mentor and friend, Dr. Joseph Breuer, and Breuer's patient, called Anna O.

Anna O. was Joseph Breuer's patient from 1880 through 1882. Twenty one years old, Anna spent most of her time nursing her ailing father. She developed a bad cough that proved to have no physical basis. She developed some speech difficulties, then became mute, and then began speaking only in English, rather than her usual German.

When her father died she began to refuse food, and developed an unusual set of problems. She lost the feeling in her hands and feet, developed some paralysis, and began to have involuntary spasms. She also had visual hallucinations and tunnel vision. But when specialists were consulted, no physical causes for these problems could be found.

If all this weren't enough, she had fairy-tale fantasies, dramatic mood swings, and made several suicide attempts. Breuer's diagnosis was that she was suffering from what was then called **hysteria** (now called conversion disorder), which meant she had symptoms that appeared to be physical, but were not.

In the evenings, Anna would sink into states of what Breuer called "spontaneous hypnosis," or what Anna herself called "clouds." Breuer found that, during these trance-like states, she could explain her day-time fantasies and other experiences, and she felt better afterwards. Anna called these episodes "chimney sweeping" and "the talking cure."

Sometimes during "chimney sweeping," some emotional event was recalled that gave meaning to some particular symptom. The first example came soon after she had refused to drink for a while: She recalled seeing a woman drink from a glass that a dog had just drunk from. While recalling this, she experienced strong feelings of disgust...and then had a drink of water! In other words, her symptom -- an avoidance of water -- disappeared as soon as she remembered its root event, and experienced the strong emotion that would be appropriate to that event. Breuer called this catharsis, from the Greek word for cleansing.

It was eleven years later that Breuer and his assistant, Sigmund Freud, wrote a book on hysteria. In it they explained their theory: Every hysteria is the result of a traumatic experience, one that cannot be integrated into the person's understanding of the world. The emotions appropriate to the trauma are not expressed in any direct fashion, but do not simply evaporate: They express themselves in behaviors that in a weak, vague way offer a response to the trauma. These symptoms are, in other words, meaningful. When the client can be made aware of the meanings of his or her symptoms (through hypnosis, for example) then the unexpressed emotions are

released and so no longer need to express themselves as symptoms. It is analogous to lancing a boil or draining an infection.

In this way, Anna got rid of symptom after symptom. But it must be noted that she needed Breuer to do this: Whenever she was in one of her hypnotic states, she had to feel his hands to make sure it was him before talking! And sadly, new problems continued to arise.

According to Freud, Breuer recognized that she had fallen in love with him, and that he was falling in love with her. Plus, she was telling everyone she was pregnant with his child. You might say she wanted it so badly that her mind told her body it was true, and she developed an hysterical pregnancy. Breuer, a married man in a Victorian era, abruptly ended their sessions together, and lost all interest in hysteria.

It was Freud who would later add what Breuer did not acknowledge publicly -- that secret sexual desires lay at the bottom of all these hysterical neuroses.

To finish her story, Anna spent time in a sanatorium. Later, she became a well-respected and active figure -- the first social worker in Germany -- under her true name, Bertha Pappenheim. She died in 1936. She will be remembered, not only for her own accomplishments, but as the inspiration for the most influential personality theory we have ever had.

Biography

Sigmund Freud was born May 6, 1856, in a small town -- Freiberg -- in Moravia. His father was a wool merchant with a keen mind and a good sense of humor. His mother was a lively woman, her husband's second wife and 20 years younger. She was 21 years old when she gave birth to her first son, her darling, Sigmund. Sigmund had two older half-brothers and six younger siblings. When he was four or five -- he wasn't sure -- the family moved to Vienna, where he lived most of his life.

A brilliant child, always at the head of his class, he went to medical school, one of the few viable options for a bright Jewish boy in Vienna those days. There, he became involved in research under the direction of a physiology professor named Ernst Brücke. Brücke believed in what was then a popular, if radical, notion, which we now call reductionism: "No other forces than the common physical-chemical ones are active within the organism." Freud would spend many years trying to "reduce" personality to neurology, a cause he later gave up on.

Freud was very good at his research, concentrating on neurophysiology, even inventing a special cell-staining technique. But only a limited number of positions were available, and there were others ahead of him. Brücke helped him to get a grant to study, first with the great psychiatrist Charcot in Paris, then with his rival Bernheim in Nancy. Both these gentlemen were investigating the use of hypnosis with hysterics.

After spending a short time as a resident in neurology and director of a children's ward in Berlin, he came back to Vienna, married his fiancée of many years Martha Bernays, and set up a practice in neuropsychiatry, with the help of Joseph Breuer.

Freud's books and lectures brought him both fame and ostracism from the mainstream of the medical community. He drew around him a number of very bright sympathizers who became the core of the psychoanalytic movement. Unfortunately, Freud had a penchant for rejecting people who did not totally agree with him. Some separated from him on friendly terms; others did not, and went on to found competing schools of thought.

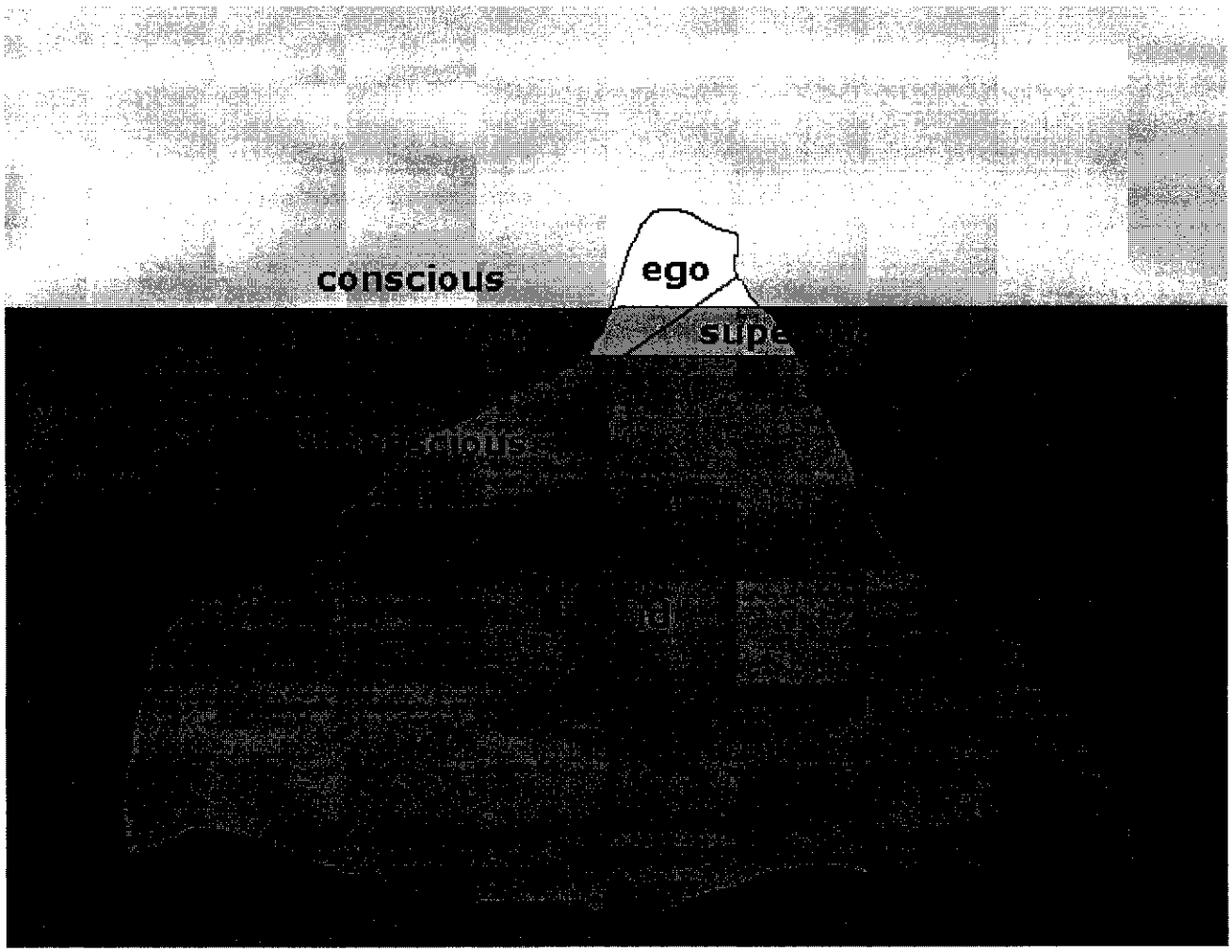
Freud emigrated to England just before World War II when Vienna became an increasing dangerous place for Jews, especially ones as famous as Freud. Not long afterward, he died of the cancer of the mouth and jaw that he had suffered from for the last 20 years of his life.

Theory

Freud didn't exactly invent the idea of the conscious versus unconscious mind, but he certainly was responsible for making it popular. The **conscious mind** is what you are aware of at any particular moment, your present perceptions, memories, thoughts, fantasies, feelings, what have you. Working closely with the conscious mind is what Freud called the **preconscious**, what we might today call "available memory:" anything that can easily be made conscious, the memories you are not at the moment thinking about but can readily bring to mind. Now no-one has a problem with these two layers of mind. But Freud suggested that these are the smallest parts!

The largest part by far is the **unconscious**. It includes all the things that are not easily available to awareness, including many things that have their origins there, such as our drives or instincts, and things that are put there because we can't bear to look at them, such as the memories and emotions associated with trauma.

According to Freud, the unconscious is the source of our motivations, whether they be simple desires for food or sex, neurotic compulsions, or the motives of an artist or scientist. And yet, we are often driven to deny or resist becoming conscious of these motives, and they are often available to us only in disguised form. We will come back to this.



The id, the ego, and the superego

Freudian psychological reality begins with the world, full of objects. Among them is a very special object, the organism. The organism is special in that it acts to survive and reproduce, and it is guided toward those ends by its needs -- hunger, thirst, the avoidance of pain, and sex.

A part -- a very important part -- of the organism is the nervous system, which has as one of its characteristics a sensitivity to the organism's needs. At birth, that nervous system is little more than that of any other animal, an "it" or **id**. The nervous system, as id, translates the organism's needs into motivational forces called, in German, **Triebe**, which has been translated as **instincts** or **drives**. Freud also called them **wishes**. This translation from need to wish is called the **primary process**.

The id works in keeping with the **pleasure principle**, which can be understood as a demand to take care of needs immediately. Just picture the hungry infant, screaming itself blue. It doesn't "know" what it wants in any adult sense; it just knows that it wants it and it wants it now. The infant, in the Freudian view, is pure, or nearly pure id. And the id is nothing if not the psychic representative of biology.

Unfortunately, although a wish for food, such as the image of a juicy steak, might be enough to satisfy the id, it isn't enough to satisfy the organism. The need only gets stronger, and the wishes just keep coming. You may have noticed that, when you haven't satisfied some need, such as the need for food, it begins to demand more and more of your attention, until there comes a point where you can't think of anything else. This is the wish or drive breaking into consciousness.

Luckily for the organism, there is that small portion of the mind we discussed before, the conscious, that is hooked up to the world through the senses. Around this little bit of consciousness, during the first year of a child's life, some of the "it" becomes "I," some of the id becomes **ego**. The ego relates the organism to reality by means of its consciousness, and it searches for objects to satisfy the wishes that id creates to represent the organisms needs. This problem-solving activity is called the **secondary process**.

The ego, unlike the id, functions according to the **reality principle**, which says "take care of a need as soon as an appropriate object is found." It represents reality and, to a considerable extent, reason.

However, as the ego struggles to keep the id (and, ultimately, the organism) happy, it meets with obstacles in the world. It occasionally meets with objects that actually assist it in attaining its goals. And it keeps a record of these obstacles and aides. In particular, it keeps track of the rewards and punishments meted out by two of the most influential objects in the world of the child -- mom and dad. This record of things to avoid and strategies to take becomes the **superego**. It is not completed until about seven years of age. In some people, it never is completed.

There are two aspects to the superego: One is the **conscience**, which is an internalization of punishments and warnings. The other is called the **ego ideal**. It derives from rewards and positive models presented to the child. The conscience and ego ideal communicate their requirements to the ego with feelings like pride, shame, and guilt.

It is as if we acquired, in childhood, a new set of needs and accompanying wishes, this time of social rather than biological origins. Unfortunately, these new wishes can easily conflict with the ones from the id. You see, the superego represents society, and society often wants nothing better than to have you never satisfy your needs at all!

Life instincts and the death instinct

Freud saw all human behavior as motivated by the drives or instincts, which in turn are the neurological representations of physical needs. At first, he referred to them as the **life instincts**. These instincts perpetuate (a) the life of the individual, by motivating him or her to seek food and water, and (b) the life of the species, by motivating him or her to have sex. The motivational energy of these life instincts, the "oomph" that powers our psyches, he called **libido**, from the Latin word for "I desire."

Freud's clinical experience led him to view sex as much more important in the dynamics of the psyche than other needs. We are, after all, social creatures, and sex is the most social of needs. Plus, we have to remember that Freud included much more than intercourse in the term sex! Anyway, libido has come to mean, not any old drive, but the sex drive.

Later in his life, Freud began to believe that the life instincts didn't tell the whole story. Libido is a lively thing; the pleasure principle keeps us in perpetual motion. And yet the goal of all this motion is to be still, to be satisfied, to be at peace, to have no more needs. The goal of life, you might say, is death! Freud began to believe that "under" and "beside" the life instincts there was a **death instinct**. He began to believe that every person has an unconscious wish to die.

This seems like a strange idea at first, and it was rejected by many of his students, but I think it has some basis in experience: Life can be a painful and exhausting process. There is easily, for the great majority of people in the world, more pain than pleasure in life -- something we are extremely reluctant to admit! Death promises release from the struggle.

Freud referred to a **nirvana principle**. Nirvana is a Buddhist idea, often translated as heaven, but actually meaning "blowing out," as in the blowing out of a candle. It refers to non-existence, nothingness, the void, which is the goal of all life in Buddhist philosophy.

The day-to-day evidence of the death instinct and its nirvana principle is in our desire for peace, for escape from stimulation, our attraction to alcohol and narcotics, our penchant for escapist activity, such as losing ourselves in books or movies, our craving for rest and sleep. Sometimes it presents itself openly as suicide and suicidal wishes. And, Freud theorized, sometimes we direct it out away from ourselves, in the form of aggression, cruelty, murder, and destructiveness.

Anxiety

Freud once said "life is not easy!"

The ego -- the "I" -- sits at the center of some pretty powerful forces: reality; society, as represented by the superego; biology, as represented by the id. When these make conflicting demands upon the poor ego, it is understandable if it -- if you -- feel threatened, feel overwhelmed, feel as if it were about to collapse under the weight of it all. This feeling is called **anxiety**, and it serves as a signal to the ego that its survival, and with it the survival of the whole organism, is in jeopardy.

Freud mentions three different kind of anxieties: The first is **realistic anxiety**, which you and I would call fear. Actually Freud did, too, in German. But his translators thought "fear" too mundane! Nevertheless, if I throw you into a pit of poisonous snakes, you might experience realistic anxiety.

The second is **moral anxiety**. This is what we feel when the threat comes not from the outer, physical world, but from the internalized social world of the superego. It is, in fact, just another word for feelings like shame and guilt and the fear of punishment.

The last is **neurotic anxiety**. This is the fear of being overwhelmed by impulses from the id. If you have ever felt like you were about to "lose it," lose control, your temper, your rationality, or even your mind, you have felt neurotic anxiety. Neurotic is actually the Latin word for nervous, so this is nervous anxiety. It is this kind of anxiety that intrigued Freud most, and we usually just call it anxiety, plain and simple.

The defense mechanisms

The ego deals with the demands of reality, the id, and the superego as best as it can. But when the anxiety becomes overwhelming, the ego must defend itself. It does so by unconsciously blocking the impulses or distorting them into a more acceptable, less threatening form. The techniques are called the **ego defense mechanisms**, and Freud, his daughter Anna, and other disciples have discovered quite a few.

Gestalt Psychology

Dr. C. George Boeree

Gestalt Psychology, founded by Max Wertheimer, was to some extent a rebellion against the molecularism of Wundt's program for psychology, in sympathy with many others at the time, including William James. In fact, the word Gestalt means a unified or meaningful whole, which was to be the focus of psychological study instead.

It had its roots in a number of older philosophers and psychologists:

Ernst Mach (1838-1916) introduced the concepts of **space forms** and **time forms**. We see a square as a square, whether it is large or small, red or blue, in outline or technicolor... This is space form. Likewise, we hear a melody as recognizable, even if we alter the key in such a way that none of the notes are the same.

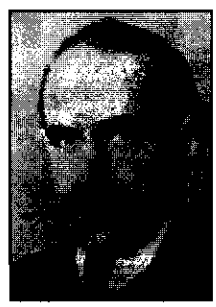
Christian von Ehrenfels (1859-1932), who studied with Brentano in Vienna, is the actual originator of the term **Gestalt** as the Gestalt psychologists were to use it. In 1890, in fact, he wrote a book called **On Gestalt Qualities**. One of his students was none other than Max Wertheimer.

Oswald Külpe (1862-1915) was a student of G. E. Müller at Göttingen and received his doctorate at Leipzig. He studied as well with Wundt, and served as Wundt's assistant for many years. He did most of his work while at the University of Würzburg, between 1894 and 1909.

He is best known for the idea of **imageless thoughts**. Contrary to Wundtians, he showed that some mental activities, such as judgments and doubts, could occur without images. The "pieces" of the psyche that Wundt postulated -- sensations, images, and feelings -- were apparently not enough to explain all of what went on.

He oversaw the doctoral dissertation of one Max Wertheimer.

Max Wertheimer



So who was this Max Wertheimer? He was born in Prague on April 15, 1880. His father was a teacher and the director at a commercial school. Max studied law for more than two years, but decided he preferred philosophy. He left to study in Berlin, where he took classes from Stumpf, then got his doctoral degree (summa cum laude) from Külpe and the University of Würzburg in 1904.

In 1910, he went to the University of Frankfurt's Psychological Institute. While on vacation that same year, he became interested in the perceptions he experienced on a train. While stopped at the station, he bought a toy stroboscope -- a spinning drum with slots to look through and pictures on the inside, sort of a primitive movie machine or sophisticated flip book.

At Frankfurt, his former teacher Friedrich Schumann, now there as well, gave him the use of a tachistoscope to study the effect. His first subjects were two younger assistants, Wolfgang Köhler and Kurt Koffka. They would

become his lifelong partners.

He published his seminal paper in 1912: "Experimental Studies of the Perception of Movement." That year, he was offered a lectureship at the University of Frankfurt. In 1916, he moved to Berlin, and in 1922 was made an assistant professor there. In 1925, he came back to Frankfurt, this time as a professor.

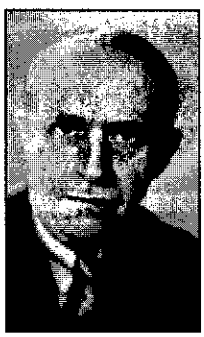
In 1933, he moved to the United States to escape the troubles in Germany. The next year, he began teaching at the New School for Social Research in New York City. While there, he wrote his best known book, **Productive Thinking**, which was published posthumously by his son, Michael Wertheimer, a successful psychologist in his own right. He died October 12, 1943 of a coronary embolism at his home in New York.

Wolfgang Köhler

Wolfgang Köhler was born January 21, 1887, in Reval, Estonia. He received his PhD in 1908 from the University of Berlin. He then became an assistant at the Psychological Institute in Frankfurt, where he met and worked with Max Wertheimer.

In 1913, he took advantage of an assignment to study at the Anthropoid Station at Tenerife in the Canary Islands, and stayed there till 1920. In 1917, he wrote his most famous book, **Mentality of Apes**.

In 1922, he became the chair and director of the psychology lab at the University of Berlin, where he stayed until 1935. During that time, in 1929, he wrote **Gestalt Psychology**. In 1935, he moved to the U.S., where he taught at Swarthmore until he retired. He died June 11, 1967 in New Hampshire.



Kurt Koffka

Kurt Koffka was born March 18, 1886, in Berlin. He received his PhD from the University of Berlin in 1909, and, just like Köhler, became an assistant at Frankfurt.

In 1911, he moved to the University of Giessen, where he taught till 1927. While there, he wrote **Growth of the Mind: An Introduction to Child Psychology** (1921). In 1922, he wrote an article for Psychological Bulletin which introduced the Gestalt program to readers in the U.S.

In 1927, he left for the U.S. to teach at Smith College. He published Principles of Gestalt Psychology in 1935. He died in 1941.

The Theory

Gestalt psychology is based on the observation that we often experience things that are not a part of our simple sensations. The original observation was Wertheimer's, when he noted that we perceive motion where there is nothing more than a rapid sequence of individual sensory events. This is what he saw in the toy stroboscope he bought at the Frankfurt train station, and what he saw in his laboratory when he experimented with lights flashing in rapid succession (like the Christmas lights that appear to course around the tree, or the fancy neon signs in Las Vegas that seem to move). The effect is called **apparent motion**, and it is actually the basic principle of motion pictures.

If we see what is not there, what is it that we are seeing? You could call it an illusion, but its not an hallucination. Wetheimer explained that you are seeing an effect of the whole event, not contained in the sum of the parts. We see a coursing string of lights, even though only one light lights at a time, because the whole event contains relationships among the individual lights that we experience as well.

Furthermore, say the Gestalt psychologists, we are built to experience the structured whole as well as the individual sensations. And not only do we have the ability to do so, we have a strong tendency to do so. We even add structure to events which do not have gestalt structural qualities.

In perception, there are many organizing principles called **gestalt laws**. The most general version is called the **law of pragnanz**. Pragnanz is German for pregnant, but in the sense of pregnant with meaning, rather than pregnant with child. This law says that we are innately driven to experience things in as good a gestalt as possible. "Good" can mean many things here, such a regular, orderly, simplicity, symmetry, and so on, which then refer to specific gestalt laws.

For example, a set of dots outlining the shape of a star is likely to be perceived as a star, not as a set of dots. We tend to complete the figure, make it the way it "should" be, finish it. Like we somehow manage to see this as a "B"...

The **law of closure** says that, if something is missing in an otherwise complete figure, we will tend to add it. A triangle, for example, with a small part of its edge missing, will still be seen as a triangle. We will "close" the gap.

The **law of similarity** says that we will tend to group similar items together, to see them as forming a gestalt, within a larger form. Here is a simple typographic example:

OXXXXXXXXXX
XOXXXXXXXXX
XXOXXXXXXXX
XXXOXXXXXXX
XXXXOXXXXXX
XXXXXOXXXXX
XXXXXXOXXXX
XXXXXXXOXXX
XXXXXXXXOXX
XXXXXXXXXOX
XXXXXXXXXXO

It is just natural for us to see the o's as a line within a field of x's.

Another law is the law of proximity. Things that are close together as seen as belonging together. For example...

****

****

****

You are much more likely to see three lines of close-together *'s than 14 vertical collections of 3 *'s each.

Next, there's the law of symmetry. Take a look at this example:

[ ][ ][ ]

Despite the pressure of proximity to group the brackets nearest each other together, symmetry overwhelms our perception and makes us see them as pairs of symmetrical brackets.

Another law is the law of continuity. When we can see a line, for example, as continuing through another line, rather than stopping and starting, we will do so, as in this example, which we see as composed of two lines, not as a combination of two angles...:

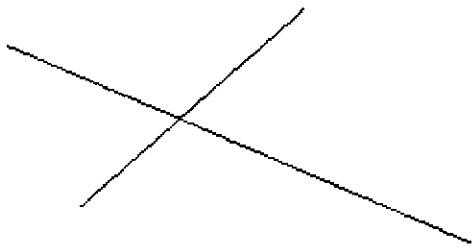
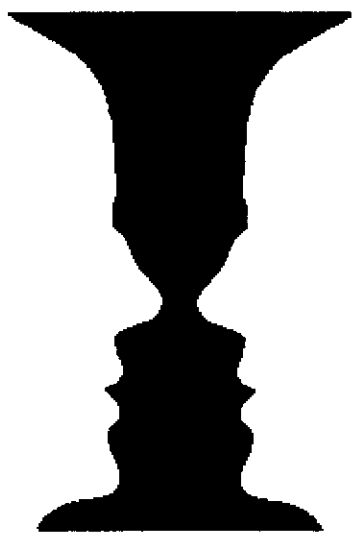


Figure-ground is another Gestalt psychology principle. It was first introduced by the Danish phenomenologist Edgar Rubin (1886-1951). The classic example is this one...



Basically, we seem to have an innate tendency to pereive one aspect of an event as the figure or fore-ground and the other as the ground or back-ground. There is only one image here, and yet, by changing nothing but our attitude, we can see two different things. It doesn't even seem to be possible to see them both at the same time!

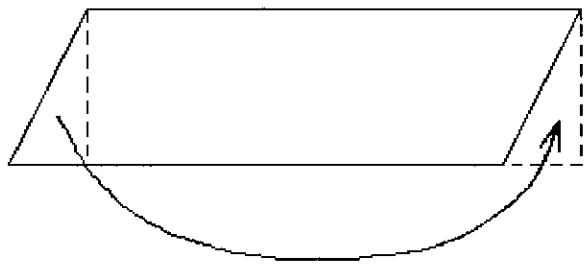
But the gestalt principles are by no means restricted to perception -- that's just where they were first noticed. Take, for example, **memory**. That too seems to work by these laws. If you see an irregular saw-tooth figure, it is likely that your memory will straighten it out for you a bit. Or, if you experience something that doesn't quite make sense to you, you will tend to remember it as having meaning that may not have been there. A good example is dreams: Watch yourself the next time you tell someone a dream and see if you don't notice yourself modifying the dream a little to force it to make sense!

Learning was something the Gestalt psychologists were particularly interested in. One thing they noticed right away is that we often learn, not the literal things in front of us, but the **relations** between them. For example, chickens can be made to peck at the lighter of two gray swatches. When they are then presented with another two swatches, one of which is the lighter of the two preceding swatches, and the other a swatch that is even lighter, they will peck not at the one they pecked at before, but at the lighter one! Even something as stupid as a chicken "understands" the idea of relative lightness and darkness.

Gestalt theory is well known for its concept of **insight learning**. People tend to misunderstand what is being suggested here: They are not so much talking about flashes of intuition, but rather solving a problem by means of the recognition of a gestalt or organizing principle.

The most famous example of insight learning involved a chimp named Sultan. He was presented with many different practical problems (most involving getting a hard-to-reach banana). When, for example, he had been allowed to play with sticks that could be put together like a fishing pole, he appeared to consider in a very human fashion the situation of the out-of-reach banana thoughtfully -- and then rather suddenly jump up, assemble the poles, and reach the banana.

A similar example involved a five year old girl, presented with a geometry problem way over her head: How do you figure the area of a parallelogram? She considered, then excitedly asked for a pair of scissors. She cut off a triangle from one end, and moved it around to the other side, turning the parallelogram into a simple rectangle. Wertheimer called this **productive thinking**.



The idea behind both of these examples, and much of the gestalt explanation of things, is that the world of our experiencing is meaningfully organized, to one degree or another. When we learn or solve problems, we are essentially recognizing meaning that is there, in the experience, for the "dis-covering."

Most of what we've just looked at has been absorbed into "mainstream" psychology -- to such a degree that many people forget to give credit to the people who discovered these principles! There is one more part of their theory that has had less acceptance: **Isomorphism**.

Isomorphism suggests that there is some clear similarity in the gestalt patterning of stimuli and of the activity in the brain while we are perceiving the stimuli. There is a "map" of the experience with the same structural order as the experience itself, albeit "constructed" of very different materials! We are still waiting to see what an experience "looks" like in an experiencing brain. It may take a while.

Kurt Lewin

Gestalt Psychology, even though it no longer survives as a separate entity, has had an enormous impact. Two people in particular lead the way in introducing it into other aspects of psychology: Kurt Goldstein and Kurt Lewin.

Kurt Lewin was born September 9, 1890, in Mogilno, Germany. He received his PhD from the University of Berlin under Stumpf. After military service, he returned to Berlin where he worked with Wertheimer, Koffka, and Köhler.

Personality Theories

B. F. SKINNER

1904 - 1990

Dr. C. George Boeree

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.

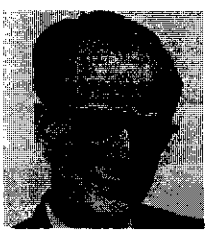
Burrhus was an active, out-going boy who loved the outdoors and building things, and actually enjoyed school. His life was not without its tragedies, however. In particular, his brother died at the age of 16 of a cerebral aneurysm.

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.

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-pushing 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-pushing), 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.

Readings

Whether you agree with him or not, Skinner is a good writer and fun to read. I've already mentioned ***Walden II*** and ***Beyond Freedom and Dignity*** (1971). The best summary of his theory is the book ***About Behaviorism*** (1974).


HOME

Personality Theories

CARL ROGERS

1902 - 1987

Dr. C. George Boeree

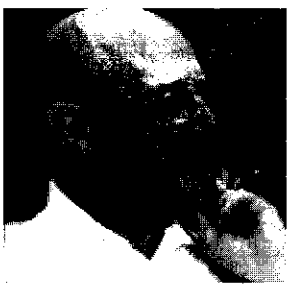
En Français, traduit par Kate Bondareva

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 Wisconsisn. 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.

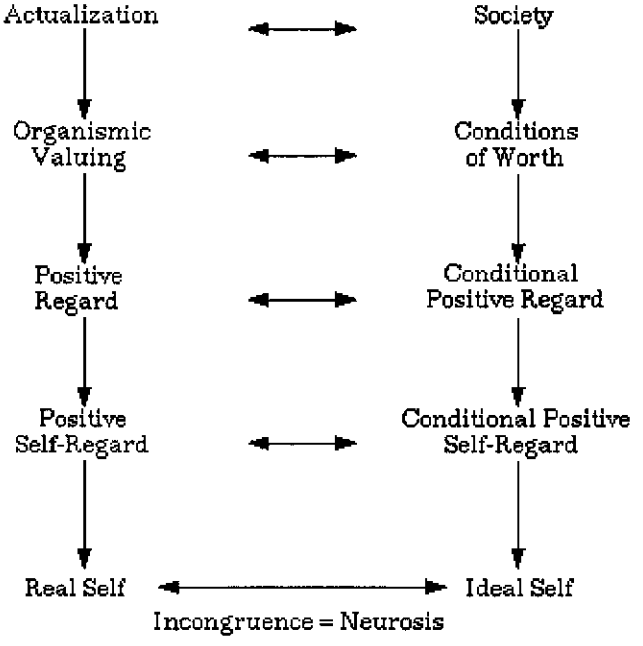
Another thing -- perhaps peculiarly human -- that we value is **positive self-regard**, that is, self-esteem, self-worth, a positive self-image. We achieve this positive self-regard by experiencing the positive regard others show us over our years of growing up. Without this self-regard, we feel small 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 brocolli 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.

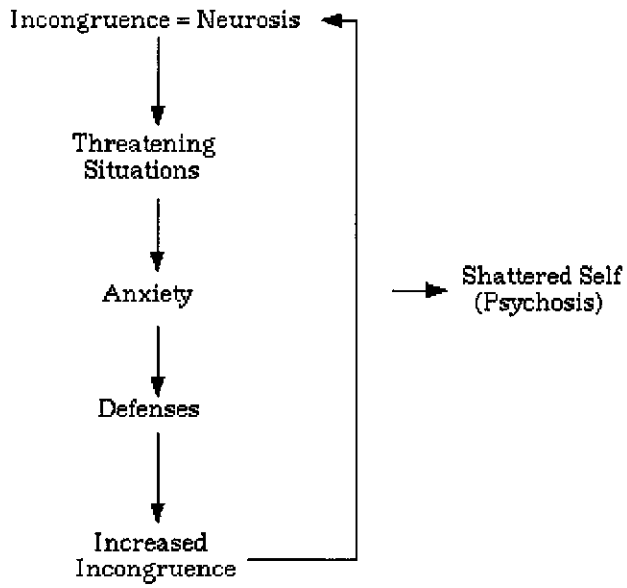


Incongruity

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 synch with your own self. If this all sounds familiar to you, it is precisely the same point made by Karen Horney!



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 acutalizing 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 acualization, 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.