

A Reappraisal of Wilhelm Wundt

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Approximately 100 years ago, in an era of intellectual ferment, events of marked consequence took place in the history of psychology. It was in the decade of the 1870s that the first handbook of experimental psychology appeared, followed soon by the founding of the first formal laboratory of experimental psychology. Both were the achievements of Wilhelm Wundt, ever since recognized as experimental psychology's great patron, though later barred from any role that might remotely resemble sainthood. Soon after the wave of "new" psychologists spread out from Wundt's laboratory, a series of intellectual revolutions largely erased from memory the content of Wundtian psychological theory.

Now that the movement set in motion by Wundt has come through its first century, it would seem fitting to mark the centenary by briefly turning back, reexamining psychology's historical foundations, and paying homage to the founding father. There is, however, another reason for review, being less ceremonial and clearly more interesting. To put it simply, the few current Wundt-scholars (and some do exist) are in fair agreement that Wundt as portrayed today in many texts and courses is largely fictional and often bears little resemblance to the actual historical figure (cf. Blumenthal, 1970; Bringmann, Balance, & Evans, 1975; Mischel, 1970).

Naturally, it might be suspected that the above radical statement is only the nit-picking of a few antiquarians obsessed with minor matters of interpretation. But alas, such is not the case. These are claims about the very fundamentals of Wundt's work, often asserting the opposite of what has been a standard description prevailing over much of the past century. Yet, if popular historical accounts

of Wundt are in need of serious correction, then one might again ask whether Wundt still turns out to be irrelevant and of little interest. This article is addressed to that question, and its answers will, I suspect, contain some surprises for many readers.

There is another question that immediately follows upon these claims. It is, How could such historical misinterpretations have arisen? This is surely a fascinating question but one requiring separate treatment. For the moment merely take note that Wundtian anecdotes have long been passed down from author to author without worthy recourse to original sources, and, also, that it is common in intellectual history for later schools of thought to foster distortions and misinterpretations of earlier ones—psychology, of course, offering numerous opportunities. For now, let us examine the fundamentals of Wundt's psychology that have, for better or worse, been disguised or lost in the course of history's machinations.

Wundt's Method

The basic premise in Wundtian psychology is that the only certain reality is immediate experience. Proceeding from this premise, Wundt had accepted the following goals for all science: the construction of explanations of experience and the development of techniques for objectifying experience. By the latter, he meant that the scientist attempts to communicate and reproduce his experiences in others in standardized ways; thus it becomes possible to perform tests that lead to public agreement about phenomena and to agreement about their explanation. This was commonplace for Wundt and is found at the outset of many of his texts.

In the natural sciences, as Wundt continues, it is the attributes of experience derived from external objects and energies that are subjected to tests, explanations, and public agreement. But in the case of psychology, it is the attributes of experience derived from the processes of the experiencing subject that are made the object of tests, explanations, and public agreement. These

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psychological entities include experienced memory and perceptual capacities, fluctuations of attention or alertness, ranges of our sensitivities, etc. In the jargon of today, we would without hesitation say "human information-processing capacities."

Yet it is this subtle division between the physical and the psychological sciences that has led to innumerable textbook treatments of Wundt as a mind-body dualist, and that is one of history's glaring distortions. For if you read Wundt, in almost any of his texts, you will discover that his rejection of mind-body dualism is as emphatic a statement on the matter as you are likely ever to encounter. He often said that psychology cannot be defined as the science of the mind because there are no objects called "minds" that are distinct from objects called "bodies," a scenario that appears repeatedly in his works.

Although physiologists and psychologists study one and the same organism, Wundt viewed them as analyzing and objectifying different experiences derived from different vantage points. This is now usually called the "double-aspect" resolution of the mind-body problem. And Wundt's use of the phrase "psychophysical parallelism" referred to this same view, though again it unfortunately led many later reviewers to the mind-body-dualism interpretation. Rather, it referred to the separate orientations of physiology and psychology where it is separate *methodologies*, in the sense of separate types of observations, that here run in parallel.

Another serious problem of misinterpretation concerns Wundt and *introspection*. Contrary to frequent descriptions, Wundt was not an introspectionist as that term is popularly applied today. The thrust behind his entire experimental program was the claim that progress in psychology had been slow because of reliance on casual, unsystematic introspection, which had led invariably to unresolvable debates. In several books and monographs (in particular, 1888 and 1907) Wundt argued that armchair introspection could, in principle, never succeed, being a logical impossibility as a scientific technique. The 1907 monograph was a severe critique of the Würzburg psychologists for their return to an earlier style of unverifiable introspection.

Wundt promoted the cause of experimental psychology more through accomplishments in his laboratory than through polemics. From its outset, the Wundtian program followed the general conceptions of experimental science and the requirement that private experience be made public

and replicable, in this case for the study of perception, attention, memory, etc. To be sure, there were some disagreements, conflicting data, and unsupported speculations in those days, just as there are today.

Wundt's adherence to the canons of experimental procedure was so strict that, in fact, it sharply limited his use of experiments in psychology. Thus, in the case of most "higher" mental processes such as language or concept formation, he felt that true experiments were not feasible. Instead, these topics must, he argued, be studied through techniques of historical and naturalistic observation and also of logical analysis. This Wundt did by examining the social-cultural products of human mental activity, making logical inferences about the underlying processes. In the case of language, for example, he went deeply into the technical study of linguistics (Blumenthal, 1970). So in these ways, a large part of Wundt's psychological work is not experimental.

Wundt's Theoretical System

But so far these are methodological matters and do not speak to the essence of Wundt's psychological theory. What emerged as the paradigm psychological phenomenon in his theoretical system would now be described as selective volitional attention. It is why he identified his psychology as "voluntaristic" to distinguish it from other schools (see especially Wundt, 1896b). He did not use the label "structuralist" which was proffered and perpetuated by Titchener and James.

Mischel (1970) has recently surveyed Wundt's writings, detailing Wundt's grounding in volitional-motivational processes. Yet it was with apparent forceful impact on later historical interpretation that Titchener (1908) had given short shrift to this theme, at the very heart of Wundtian psychology, because of the overtones of continental idealist philosophy in notions of volition. Titchener's longest period of formal education came at Oxford, and not surprisingly he maintained certain biases toward the British empiricist-sensationist tradition, even though that tradition was anathema to Wundt's views, and more than any other topic the brunt of Wundt's polemical writings.

Without giving supportive citation, Boring (1950) states that Wundt had opposed the implication of an active volitional agent in psychology. But now Mischel (1970) with extensive citation has shown, on the contrary, that volition-motivation

is a central, primary theme in Wundt's psychology. Briefly, that theme runs as follows: To explain a volitional act on the basis of its motives is different from the explanation of occurrences in the physical sciences, and "volitional activities are the type in terms of which all other psychological phenomena are to be construed" (Wundt, 1908, Vol. 3, p. 162).

Wundt's studies of volition, in turn, amounted to an elaborate analysis of selective and constructive attentional processes (often summarized under the term *apperception*), which he localized in the brain's frontal lobes. Other psychological processes (perceptions, thoughts, memories) are, according to Wundt, generally under the control of the central attentional process.

It is on this basis that Wundt claimed another point of separation between psychology and physics—a difference between psychological and physical causality (see especially, Wundt, 1894). In the case of physics, actions and events obey inviolable laws; but in the case of psychosocial phenomena, actions are *made* by an active agent with reference to rule systems.

Wundt acknowledged the principle of the conservation of energy and, consequently, the theoretical possibility of reducing psychological observations to physiological or physical descriptions. Still, he argued, these physical sciences would then describe the act of greeting a friend, eating an apple, or writing a poem in terms of the laws of mechanics or in terms of physiology. And no matter how fine-grained and complicated we make such descriptions, they are not useful as descriptions of psychological events. Those events need be described in terms of intentions and goals, according to Wundt, because the actions, or physical forces, for a given psychological event may take an infinite variety of physical forms. In one notable example, he argued that human language cannot be described adequately in terms of its physical shape or of the segmentation of utterances, but rather must be described as well in terms of the rules and intentions underlying speech. For the ways of expressing a thought in language are infinitely variable, and language is governed by creative rules rather than fixed laws (Wundt, 1900-1920).

Mechanism or Organism?

These distinctions lead to a related and consistent theme in Wundt's writings concerning what he called "the false materialization of mental processes," which he found prevalent in other schools

of psychology, especially associationism. His reactions against associationism were directed mostly at the form it had assumed in mid-19th-century Germany in Herbart's psychology.

Herbart, you may recall, had atomized mental processes into elemental ideas that became associated into compounds according to classical associationist descriptions. Wundt considered that approach to be a mere primitive analogy to systems of physical mechanics, and he argued at length that those systems teach little about the interrelations of psychological processes (Wundt, 1894). For those systems were oblivious to what he felt was the essential distinction between psychological and physical causality; they portrayed mental processes as if they were a "mere field of billiard balls" colliding and interacting with each other, where central control processes are lacking.

Boring's widely repeated assertion that Wundt turned to chemistry for his model seems clearly inaccurate to the serious reader of Wundt. However, the Wundtian mental-chemistry cliché did become popular among later textbook writers. Wundt did in his early years make brief, passing references to J. S. Mill's use of a chemical analogy to describe certain perceptual processes, namely, that one cannot determine the quality of water (i.e., "wetness") from the separate qualities of oxygen and hydrogen. Similarly, the qualities of a perception are not directly given in its underlying elements.

But Wundt points out that this analogy does not go far enough, and by the end of the century he is describing it as a false analogy because the chemical synthesis is, in the final analysis, wholly determined by its elements while the psychological synthesis is "truly a new formation, not merely the result of a chemical-like formation." And, "J. S. Mill's discussion in which the mental formation is conceived as a 'psychic chemistry' leaves out its most significant aspect—the special creative character of psychic syntheses" (Wundt, 1902, p. 684). What the chemical analogy lacks is the independent, constructive, attentional process which in the psychological case is the source of the synthesis.

Wundt did, of course, write chapters on elementary sensory-perceptual processes and elemental affective processes, but with the emphasis on *process*. And he acknowledged that a major part of any scientific methodology involved analysis of a system into component processes. Further, he stressed that these elements were to be taken as

hypothetical constructs. Such elemental processes would never actually be observed, he thought, in pure isolation but would always be aspects or features of larger images or configurations.

Here Wundt used the German word *Gebilde*. For a translation, the dictionary (*Cassell's*) gives us the following choices: either "creation," "product," "structure," "formation," "system," "organization," "image," "form," or "figure." But in the few English translations of Wundt, we find the word "compound," unfortunately again suggesting the analogy to chemistry. "Compound" is a conceivable choice, but in the context of Wundt's configurational system it seems not the best term. Another example: Wundt's "whole or unified mental impression" (*Gesamtvorstellung*) is unfortunately translated as "aggregate ideas."

In the following note in an obscure book, published in 1944, Wundt's own son, Max Wundt, rebutted the caricature of his father's work as a psychology of mental elements:

One may follow the methodologically obvious principle of advancing from the simple to the complicated, indeed even employing the approach that would construct the mind from primitive mechanical elements (the so-called psychology of mental elements). In this case, however, method and phenomena can become grossly confused. . . . Whoever in particular ascribes to my father such a conception could not have read his books. In fact, he had formed his scientific views of mental processes in reaction against a true elementistic psychology, namely against that of Herbart, which was dominant in those days. (p. 15)

To confound matters further, the later movement toward holism in Gestalt psychology placed Wundt in a contrastive position and again portrayed him as an elementalist and associationist in ways not characteristic of his intentions. True, there is always a chapter titled "Associations" in Wundt's texts—but it is a far cry from the serial linkages of atomistic ideas found among many associationists. Wundt's "associations" are "structural integrations," "creative syntheses," "fusions," and "perceptual patternings."

Wundt's later students, including Sander, Krueger, and Volkelt, renamed their school *Ganzheit* psychology or roughly "holistic psychology," and throughout the 1920s and 1930s the old Wundtian institute at Leipzig was a center for theorists with a holistic bent. Wundt's journal, the *Psychologische Studien*, which had ceased publication upon his retirement, was then reactivated with the title, *Neue Psychologische Studien*. It was the central organ of the *Ganzheit* psychologists; however, its articles primarily followed Wundt's interests in the

"higher" mental processes and hence were mostly nonexperimental investigations.

Werner (1948) has written that Wundt represented the halfway mark in the transition from Herbart's atomism to the Gestaltist's holism. But from the point of view of Wundt's voluntaristic psychology, the essential central control processes were of no more primacy to the Gestaltists than to Herbart—both conceived a rather passive organism, one that is controlled by external or independent forces such as the a priori self-organizing qualities of sensory fields. Both, in sharp contrast to Wundt, appealed to physics for models and theories.

Modern Reconstructions

Now to describe Wundt's psychology in more detail, and to consider its present relevance, I want to outline some six current trends that could be viewed as reconstructions of Wundtian psychology in modern clothing:

First, Wundt's central emphasis on volitional processes bears noteworthy resemblance to the modern work on "cognitive control" as found, for example, in extensive research by Gardner, Klein, Holzman, and their associates (cf. Gardner, Holzman, Klein, Linton, & Spence, 1959). Both traditions used notions of different styles of attention deployment to explain a variety of perceptual and thought processes (sometimes even involving the same materials, e.g., the Müller-Lyer illusion).

The recent research, employing factor analyses of a variety of performance tasks, has determined two independent variables of cognitive control, which Gardner et al. call "field-articulation" and "scanning." These can be defined, as well, simply by substituting a similar description found in Wundt's psychology texts, as follows: First, in corresponding order, is Wundt's mental "clearness" process that concerns the focusing or emphasizing of a single item of experience. Wundt described this as "apperceptive synthesis" where variations from broad to narrow syntheses may occur. The second variable is a mental "distinctiveness" process which is the marking off of an item of experience from all others. Wundt described this as "apperceptive analysis," a relating and comparing function. The discovery and testing of nearly identical attention-deployment factors in recent times occurred independently of the old Wundtian psychology. And too, the recent studies make fre-

quent use of elaborate personality theories that were unavailable to Wundt.

Second, detailed comparisons have been made recently between the development of psycholinguistics in the 1960s and that of Wundtian psycholinguistics at the turn of the century (Blumenthal, 1970). Both the modern transformational grammarians after Chomsky and the Wundtian psycholinguists at the turn of the century trace their notions of language back to the same historical sources (e.g., to Humboldt). The psycholinguistic issues debated in the 1960s often parallel those debated at the turn of the century, such as the opposition between taxonomic and generative descriptions of language. Very briefly, Wundt's analysis of language usage depicts the transformation of simultaneous configurations of thought into sequential representations in language symbols by means of the scanning activities of attention (Wundt, 1900-1920, Vol. 1).

A *third* reconstruction concerns abnormal psychology. Among his students, the one who maintained the longest intellectual association with Wundt was the psychiatrist Emil Kraepelin (see Fischel, 1959). Kraepelin's (1919) attentional theory of schizophrenia is an application of Wundtian psychology, an explanation of schizophrenias as abnormalities of the attention-deployment (apperception) process. It conceives certain abnormalities of behavior as resulting from flaws in the central control process that may take the form of either highly reduced attentional scanning, or highly erratic scanning, or extremes of attentional focusing. Kraepelin proposed that abnormalities in simple perceptual tests should show up in schizophrenic individuals corresponding to these particular control-process distortions.

The modern attentional theory of schizophrenia is a direct revival of the Kraepelinian analysis, as noted, for example, in an extensive review by Silverman (1964). As in the Kraepelinian descriptions, abnormalities of behavior result from disruptions of the central attentional processes where there is either highly reduced or highly erratic attentional scanning and focusing. And these mental changes, again, are indicated by divergent performances in simple perceptual tests.

Fourth is Wundt's three-factor theory of affect, which was developed by analogy to his formulations of multidimensional descriptions of certain areas of sensory experience. For the description of emotional experience, he used these three bipolar affective dimensions: *pleasant versus unpleasant*,

high arousal versus low arousal, and *concentrated attention versus relaxed attention*. Wundt had adopted the first two dimensions from earlier writers on the topic of emotion. The third dimension reflects his characteristic emphasis on the process of attention.

Around the turn of the century, an intensive sequence of investigations to relate these dimensions to unique bodily response patterns did not meet with popular success. However, years later, when factor analysis became available, statistical studies of affective and attitudinal behavior again yielded factors that parallel those of Wundt rather closely (cf. Burt, 1950; Osgood, Suci, & Tannenbaum, 1957; Schlosberg, 1954; and several others reviewed by Strongman, 1973). Osgood's three dimensions are described as "good-bad," "active-passive," and "strong-weak." Schlosberg's dimensions are "pleasantness-unpleasantness," "high-low activation," and "attention-rejection."

Emotions and affects held an important place in Wundt's system because they were postulated as the constituents of volition. Further, Wundt suggested that almost every experience (perception, thought, or memory) has an affective component. Thus, affect became the basis for his explanation of pattern recognition: a melody, for instance, produces a very similar emotional configuration as it is transformed to other keys or played on other instruments. Wundt speculated that affect was the by-product of the act of apperceptive synthesis, and as such it was always on the periphery of consciousness. That is, we can never focus our attention upon an emotion, but can only focus on objects or memories that produce an emotional aura in immediate experience.

Fifth, the study of selective attention has been at the core of much of the recent work on human information processing (e.g., Broadbent, 1958; Kahneman, 1973; Moray, 1970; Neisser, 1967). It is impossible here to relate this highly complex field to the early Wundtian psychology other than to note the prominence of attention in both and that the time variable is central to both. Space permits mention of only two examples:

The seminal investigations of Sperling (1960) concerning perceptual masking are one example. Sperling took direct inspiration from Wundt's 1899 monograph on the use of tachistoscopes in psychological research in which Wundt came to the following three conclusions about the perception of extremely brief stimuli: (1) the effective duration of a percept is not identical with the duration of

the stimulus—but rather reflects the duration of a psychological process; (2) the relation between accuracy of a perception and stimulus duration depends on pre- and postexposure fields (which may induce what we now call masking); and (3) central processes, rather than peripheral sense organ aftereffects, determine these critical times. Wundt's observations spurred a body of early research, and those early data are now relevant to a large body of similar modern investigations.

Perhaps the most frequently employed technique in Wundt's laboratory was that of reaction-time measurement. This was the direct adoption of a program suggested earlier by Donders (1868–1869). Essentially, inferences were made about human information-processing capacities on the basis of measured performance times under systematically varied performance conditions. This program has now, in post-mid-20th century, been widely and successfully revived. It is well illustrated, for instance, in the seminal studies of Sternberg (1970) on the attentional scanning of immediate-memory images, in which Sternberg draws the relation between his work and the earlier Donders program.

For a *sixth* and final comparison, I must refer to what Wundt called his deepest interest, which resulted in a 10-volume work titled *Völkerpsychologie: Eine Untersuchung der Entwicklungsgesetze von Sprache, Mythos, und Sitte*. An English version of this title could be *Cultural Psychology: An Investigation of the Developmental Laws of Language, Myth, and Morality*.¹ Appearing from 1900 through 1920, this series contains two books on language, three on myth and religion, one on art, two on society, one on law, and one on culture and history. If there is a current work by another author that is conceptually close to these volumes, it is Werner's (1948) *Comparative Psychology of Mental Development*, today read in some circles of developmental psychologists.

Following Wundt, Werner described an *organismic* psychology that is in opposition to *mechanistic*

psychologies. He also drew parallels, as did Wundt, between the development of individuals and of societies. And Werner acknowledged indebtedness to Wundt. But in Wundt's *Völkerpsychologie* there is, again, greater emphasis on volitional and attentional processes in the analysis of the development of human culture; he theorized that those central mental processes had emerged as the highest evolutionary development, and that they are the capacities that set men above other animals. It is the highly developed selective-attention capacities that, as he claimed, enabled mankind to make a consistent mental advance and to develop human culture. For without these capacities, men would forever be at the mercy of sporadic thoughts, memories, and perceptions.

Wundt's Historical Contexts

Wundt was not a mere encyclopedist or compiler of volumes, contrary to many descriptions. It was typical of him, however, always to compare and to contrast his system with other schools of thought, ancient and modern. Perhaps in that sense he could be considered an encyclopedist. True, most of his works begin with a long recital of his antecedents and the antecedents of rival positions.

Wundt's motivation for scholarly productivity should not be surprising, considering the strong family traditions that lay behind him (and that went unrecognized by most historical writers). Recent researchers (Bringmann et al., 1975) claim that no other German intellectual has a family tree containing as many ancestors engaged in intellectual pursuits. On his father's side were historians, theologians, economists, and geographers. On his mother's side were natural scientists and physicians. Two of his ancestors had been rectors of the University of Heidelberg.

To conclude, I wish to draw an outline of the streams of history in which Wundt lived and worked. Historians have often defined a few broad, alternating cultural epochs in the 19th century. At some risk in using a much-abused word, one might call each a "zeitgeist"—a time that favored a particular cultural style. These periods begin with the dominant romanticism and idealism early in the century, largely a German-inspired ethos shared by Kant, Humboldt, Schopenhauer, Goethe, Hegel, and Fichte, to mention a few. In that era, philosophy, science, religion, and art were often combined into something called "nature-philosophy." Such an integration was exemplified in the

¹ *Völkerpsychologie* has also been translated as "folk psychology," "psychology of peoples," and "ethnic psychology." Wundt quite deliberately avoided the terms *sociology* and *anthropology* because they were then heavily identified with the mid-19th-century positivism of Auguste Comte and related Anglo-French trends, which Wundt opposed. Some later writers on the history of psychology erroneously stated that the *Völkerpsychologie* is available in English translation. They apparently mistook a different and simpler one-volume work that E. Schaub (1916) translated as *Elements of Folk Psychology*.

pantheistic writings of Gustav Fechner, an exotic latecomer to the romantic movement and an important source of inspiration for Wundt. (In several ways, Wundt's 10-volume *Völkerpsychologie* reflects the spirit of the old nature-philosophy.)

Around the mid-19th century, a positivist and materialist movement grew dominant by vigorously rejecting the previous idealism. There then appeared the influential Berlin Physical Society, the mechanistic psychology of Herbart, the behavioristic linguistics of the so-called *Junggrammatiker* linguists, and Comtean positivist sociology, among other examples across the disciplines. At the peak of this movement, academicians became methodology conscious to the extreme. The taxonomic methods of biology were imported into the social sciences. There was often a downgrading of "mentalism" in favor of "physicalism" and "environmentalism."

Then, toward the end of the 19th century came a resurgence of the romanticist-idealist outlook, particularly in continental Europe. It has been described either as neoromanticism, neoidealism, or neo-Kantianism. H. Stuart Hughes (1958) has provided a summarization in his influential book, *Consciousness and Society: The Reorientation of European Social Thought 1890-1930*. At around the time of World War I, this movement went into sharp decline, being displaced by a rebirth and rise in popularity of positivism and behaviorism which subsequently dominated many intellectual circles well into the 20th century.

Wundt's psychology rose and fell with the late-19th-century neoidealism. His core emphasis on volition and apperception comes straight from the earlier German idealist philosophy. It is not surprising that this should be so, for as a youth he was deeply inspired by the romanticist-idealist literature and nature-philosophy (Wundt, 1920). Certainly his intellectual development also included the influence of mid-19th-century positivism, especially in his promotion of experimental psychology. Yet, during that positivist period, he had remained largely unrecognized as a psychological theorist. The popular success of his theoretical system seems coordinated with the beginnings of neoidealist reorientations, and his system became fully formed in the *Grundriss* of 1896 (and later editions; Wundt, 1896a).

But unfortunately for Wundt, zeitgeist support disappeared rapidly in the early 20th century; definitions of psychology were then changing, and his works were soon meaningless to a newer genera-

tion. Few, especially outside Germany, understood any more what the old term *apperception* had once referred to.

Strange as it may seem, Wundt may be more easily understood today than he could have been just a few years ago. This is because of the current milieu of modern cognitive psychology and of the recent research on human information processing. Yet this new understanding does require serious study of Wundt in the original German. Most current textbook summaries of Wundt grew out of a time when early behaviorist and positivist movements were eager to encourage a break with the past, hence giving understandably little effort to careful description of the enormous body of writings they were discarding. Simplistic historical accounts resulted.

Today much of the history of Wundt remains to be told, both of his personal development and of his psychological system. It is well worth telling.

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Scientific Awards Program for 1976

The Committee on Scientific Awards is accepting nominations for its award program. Each year the Committee selects up to three persons as recipients of the **Distinguished Scientific Contribution Award** who, in its opinion, have made the most distinguished theoretical or empirical contributions to scientific psychology in recent years.

The **Distinguished Contribution for Applications in Psychology Award** will be given for the fourth time this year. This award will be presented to an individual who, in the Committee's opinion, has engaged in a program of research that is systematic and applied in character.

A new award, the **Early Career Award**, has been established to recognize the large number of excellent young psychologists. For purposes of this award, psychology has been divided into nine areas (human learning/cognition, psychopathology, physiological, animal, personality, developmental, methodological, social, and sensation/perception), and three awards are given in three-year cycles. The titles of the areas were chosen not to stereotype the field but only for convenient identification. The titles are not restrictive, and the Committee will be very inclusive in considering nominees. For 1976, nominations of persons who received their PhD after 1967 are being sought from the areas of developmental, personality, and animal learning. The Committee would appreciate receiving a statement on the worthiness of the nominee, along with a vita, list of publications, and reprints of his or her outstanding, early contributions to science.

Names and appropriate information which will guide the Committee on Scientific Awards in conducting an intensive career review and evaluation should be forwarded to the Office of Scientific Affairs, American Psychological Association, 1200 Seventeenth Street, N.W., Washington, D.C. 20036. *Deadline for nominations is January 15, 1976.*