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Psychology lost one of its more eloquent and renowned spokesmen with the death of Ernest (“Jack”) Hilgard at his home in Palo Alto, California, on October 22, 2001. Regarded by many as the dean and elder statesman of American psychology, Hilgard was 97 years old at the time of his death from cardiopulmonary arrest.

Jack Hilgard was born July 25, 1904, and raised in Belleville, Illinois. In 1924, he earned a bachelor’s degree in chemical engineering from the University of Illinois at Urbana-Champaign. He did his graduate work at Yale University, first with a year in the Divinity School studying social ethics and the remainder in the psychology department. Hilgard received his doctoral degree in 1930 under Raymond Dodge’s supervision.

As an instructor on the Yale faculty from 1929 to 1933, Hilgard was present during the early development of the Institute for Human Relations. The institute was a lively intellectual environment fostering interdisciplinary research and bringing together researchers throughout the social sciences. Clark Hull became a central figure at the institute and was able to involve a number of young researchers who were to become important figures in psychology over the ensuing decades. Among them were Neal Miller, Kenneth Spence, Hobart Mowrer, and Robert Sears. Hilgard was caught up in their enthusiasm for extending learning theory to cover many social and cultural phenomena.

Hilgard conducted his early research on human eye blink conditioning. He continued to publish on basic conditioning phenomena throughout the 1930s. Included among these studies were his articles evaluating the stimulus substitution view of conditioning, individual differences in the ease of conditioning, and the role of foreknowledge or awareness of the conditioned stimulus–unconditioned stimulus contingency on conditioned responding.

Hilgard’s early research culminated with publication in 1940 of the classic text *Conditioning and Learning*, which he wrote with Donald Marquis. *Conditioning and Learning* was written when American behaviorism was in its ascendancy. Many psychologists believed that the mind was to be studied through behavior and that behavior was brought about largely by past learning. Thus, theories of behavior were supplanted by theories about learning, with some ideas added regarding how incentives and motives

influence the expression of what had been learned.

Conditioning and Learning was exemplary in classifying and organizing critical concepts, results, and hypotheses regarding the dynamic laws of conditioning

The authors provided balanced discussions of the controversies of the day between the followers of Clark

Hull and those of Edward Tolman. Hilgard and Marquis noted the strengths of each camp but also chided both

for their failure to extend conditioning principles to illuminate the nature of common learning tasks, such as school subjects. Despite its classic status, *Conditioning*

and Learning was never revised by Hilgard or Marquis.

Gregory Kimble later revised, updated, and largely rewrote the book (1961).

With publication of *Conditioning and Learning*,

Hilgard wound down his research on conditioning and turned increasingly to studies of human motivation and

personality, especially levels of aspiration. In 1933, Jack had taken a faculty position at Stanford University, where

he held a joint appointment in psychology and the School of Education; his interests turned increasingly to the uses of psychology in education. Indicative of his national eminence

in education was that he was among a delegation of educators invited by General Douglas MacArthur to advise

his staff and the Japanese ministry of education on demilitarizing the Japanese school system after World War II.

In 1940 and early 1941, the United States was edging toward World War II, and psychologists were asked

to contribute their expertise to the upcoming national war effort. Hilgard left Stanford from 1941 to 1944 to

work in the Offices of War Information and Civil Requirements in Washington, DC. Much of his work involved

developing and analyzing surveys of civilian activities in connection with the war effort. Later he

worked in the Bureau of Overseas Intelligence.

In 1942, Jack was recruited to be a member of the

Subcommittee on Survey and Planning, a National Research Council group led by Robert Yerkes and charged

with drawing up plans for the expansion and practical uses of psychology during and after the war. The subcommittee

recommended several actions designed to bring the academic science of psychology into closer relations with the

emerging profession of psychology. Its proposals had a major influence on the reorganization efforts of the

American Psychological Association (APA) after the war. Among the recommendations were proposals to

adopt new bylaws allowing the creation of different divisions of APA, appoint initial officers of these divisions, set up a central office in Washington, DC, and codify procedures for electing members to the Council of Representatives and the Board of Directors. After being adopted, these recommendations forever altered the nature of APA and kept together under one umbrella psychologists of disparate interests and professional allegiances. Later, Hilgard was to play prominent roles in APA governance, serving on the Board of Directors and as chair of the Policy and Planning Board of APA. In 1949, Hilgard was president of APA. In 1948, Hilgard published his *Theories of Learning* text. The volume was so comprehensive and well written that it strongly influenced teaching and research on learning for the next generation of students. The book was organized primarily according to major psychologists, whose names were attached to their theoretical approaches:

Ernest R. Hilgard (1904–2001)

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284 Month 2001 Thorndike, Guthrie, Hull, Skinner, Lewin, Wheeler, and Tolman. *Theories of Learning* became an immediate citation classic and standard reference work, studied by succeeding generations of psychology students. This “big names” organization of *Theories of Learning* continued throughout later editions, with revisions that incorporated new approaches to learning while replacing approaches that had declined in influence. Hilgard’s research interests turned to hypnosis about the time *Theories of Learning* needed updating for its third edition, around 1966. Given that his focus was now elsewhere, he invited me to draft chapters on new developments and update the older chapters. In later editions, published in 1975 and 1981, Hilgard himself added new material to demonstrate how the big name theories continued to address contemporary issues. A third text that established Hilgard’s reputation as a masterful integrator of psychological materials was his *Introduction to Psychology*, first published in 1953. During the following 48 years, it has gone through 12 revisions and continues to portray the central ideas that define the complex discipline of psychology. This text, shaped by the growing cognitive sentiment of the era, encompassed not only the standard “hard” topics of

sensation, perception, learning, and neurophysiology of behavior but also the “softer” topics of child development, social and personality psychology, and varieties of consciousness. To keep the book current and topical, Hilgard, in later editions, enlisted the help of coauthors: first Richard Atkinson, then Rita Atkinson, and later Edward Smith and Daryl Bem. Throughout the 1970s, *Introduction to Psychology* was the dominant textbook in its field. In late 1970s, *Esquire* magazine rated it the most successful academic textbook in total sales for all fields. This widely used book was significant in shaping the view of psychology acquired by the mass of introductory readers, and it was effective in attracting into the discipline some of the bright scholars who were to pursue the path Hilgard had outlined in his integration of the field.

On returning to Stanford from Washington, DC, in 1944, Hilgard was appointed executive head of the Psychology Department, a post in which he served until he was appointed dean of Stanford’s graduate school from 1951 to 1955. The department had a distinguished prewar presence (with such faculty as Lewis Terman, Calvin Stone, Edward K. Strong, and Quinn McNemar). To accommodate the influx of students on the GI Bill after the war, the psychology faculty grew in number. Hilgard was central in guiding the direction of new faculty selections. Later, as graduate dean, he had even more influence on the university resources committed to the behavioral sciences.

The early 1950s were a period of large educational grants to universities from the Ford and Rockefeller Foundations. Hilgard successfully obtained external funding from the Ford Foundation and the Social Science Research Council to strengthen social science departments at Stanford, particularly psychology. He appointed Robert Sears the new executive head of the department. Sears and Hilgard together built a strong faculty with the additions of Eleanor Maccoby, Douglas Lawrence, Donald Taylor, Leon Festinger, Alex Bavelis, and Albert Bandura. Later, William Estes, Richard Atkinson, and I came to Stanford; with major guidance from Patrick Suppes, we started the program in mathematical psychology, which Roger Shepard later joined. These appointments increased the visibility of the psychology department, which attracted better graduate students, which, in turn, led to national eminence. The

groundwork for much of this rise in prominence was laid by Hilgard's wise counsel and influence.

During his term as graduate dean, Hilgard was also instrumental in bringing the Center for Advanced Study in the Behavioral Sciences to Stanford. He had been a consultant to the Ford Foundation and was able to persuade the foundation to provide start-up endowment funds for such a center and to locate it on free land borrowed from Stanford. Ever since its establishment, the center and its annual cast of visiting scholars have provided continual intellectual stimulation for students and researchers in the behavioral sciences at Stanford and other West Coast universities.

Having curtailed his research during his years as graduate dean, Jack had some serious retooling to do when that stint ended. He decided to alter course entirely and study hypnosis, a topic that was both challenging and fascinating to him. He persuaded the Ford Foundation to provide funds to help him set up the Stanford Laboratory for the Study of Hypnosis. It was from this laboratory that Hilgard was to make his major scientific contributions over the ensuing 25 years.

Hilgard steeped himself in the phenomena and phenomenology of hypnosis before starting his systematic investigations. He noticed, of course, that individuals differed greatly in their hypnotic abilities and felt that results from different experiments and labs would not be comparable unless the hypnotic abilities of the subjects were made comparable. So, one of his first steps, taken with his coworker Andre Weitzenhoffer, was the construction of scales that measured hypnotic ability or susceptibility in different subjects. Their extensive research, published in the book *Hypnotic Susceptibility* (1965), allowed them to develop several scales that measured susceptibility in a valid, stable, and reliable manner.

The Stanford Hypnotic Susceptibility Scale, Form C, has since become a standard instrument in the field.

In his work on hypnotic analgesia, Hilgard found that (a) it correlated strongly with hypnotic ability, (b) the patient was never totally pain free but experienced greatly reduced pain, and (c) the reduction in pain had two components, one due to anxiety reduction and relaxation and a second specific to the person's cognitive strategies for dealing with the painful stimulus, such as reinterpreting it, dissociating from his or her body, or distracting him- or herself with pleasant images. The

reductions in pain were sufficient for clinical applications, and the results of these applications were published by Hilgard with his wife, Josephine, in their book *Hypnosis in the Relief of Pain* (1975).
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lished by Hilgard with his wife, Josephine, in their book *Hypnosis in the Relief of Pain* (1975).
Hilgard's hypnosis research led to his major theoretical formulation, articulated in his book *Divided Consciousness* (1977). He proposed a hierarchical system of mental modules nested under central monitoring and executive functions, much like the system that was becoming fashionable in cognitive psychology. Various subsystems or cognitive modules were assumed to be more or less accessed and activated by hypnotic suggestion, which bypassed initiative or conscious intention from the central executive. Central to this theory was a phenomenon Hilgard called "the hidden observer": For example, a hypnotically analgesic subject, on an instructed cue, could call up the "hidden part" of himself and report the actual level of pain being felt, although the hypnotized subject (without the cue) would not report much pain at all.

Divided Consciousness served as a major reference work for students interested in the modern study of unconscious or nonconscious processes (e.g., see K. S. Bowers & D. Meichenbaum, 1984; J. F. Kihlstrom, 1987). To be sure, proponents of the social role-playing view of hypnosis had their alternative interpretations of Hilgard's observations (e.g., N. P. Spanos, 1986), and lively debates continue to this day.

After his formal retirement to emeritus status in 1969, Hilgard continued his research on hypnosis with federal support; in fact, he published more during his early years of retirement than he had during the preceding five years! Also during his retirement, Hilgard renewed his interest in writing about the history of psychology. This interest was encouraged by APA and by funding from other sources that enabled him to write two books: first, an annotated compilation of presidential addresses by some of the historically significant past presidents of APA (1978) and second, his monumental volume *Psychology in America: A Historical Survey* (1987). The latter, written with masterful facility, covered almost every major field of psychology and contained profiles of many eminent American psychologists

of the late 19th century and much of the 20th century. Hilgard could write authoritatively about these important figures because he knew most of them personally, interacted with them frequently at conferences, and followed their work closely. A tribute to Hilgard's good health and vigor of mind is that he continued lecturing and writing well into his late 80s, even travelling alone overseas at age 91 to give a public lecture upon receiving an honorary doctorate from the University of Oslo. Hilgard received many professional honors and awards for his scientific research and for his service to the academic community. He served a term as president of almost every psychological association he joined. He was awarded the Warren Medal from the Society of Experimental Psychologists, the APA Award for Distinguished Scientific Contributions, an APA Citation for Outstanding Lifetime Contributions to the discipline, the Gold Medal Award from the American Psychological Foundation, the Franklin Gold Medal from the International Society of Hypnosis, the National Academy of Sciences Award for Scientific Reviewing, and the Wilbur Cross Medal as an outstanding graduate of Yale University. In addition, he was elected to the National Academy of Sciences, the National Academy of Education, the American Academy of Arts and Sciences, and the American Philosophical Society, and he received honorary doctoral degrees from several universities. In 1991, in an article in the *American Psychologist*, Hilgard was recognized as one of the 10 most important contemporary psychologists by graduate department chairs.

Jack Hilgard was a devoted family man. He and Josephine Rohrs were married in 1931 while they were students at Yale, and they remained devoted to one another until Josie's death in 1989. The Hilgards raised two children: Henry, now an emeritus professor of biology at the University of California, Santa Cruz, and Elizabeth Jecker, who works in veterinary medicine and lives in San Luis Obispo, California. There are five grown grandchildren, three from Henry and two from Elizabeth.

After moving with Jack to Stanford, having already earned her doctorate in psychology, Josie enrolled as a medical school student, received a doctorate of medicine, and became a practicing psychoanalyst. While employed in Stanford's psychiatry department, Josie also collaborated with Jack in his later studies of hypnosis, and she singly authored a number of studies and a book.

Jack and Josie enjoyed sharing the limelight and honors received for their joint work. In those days of implicit nepotism, they broke through the barrier that had prevented universities from hiring both husband and wife on full-time faculty appointments, and their example led the way for many other dual appointments at Stanford. They were a delightful couple that exuded graceful hospitality in making newcomers and visitors to the Stanford community feel comfortable and welcome. Jack Hilgard was a respected and beloved man throughout his professional life. He was politically liberal and dedicated to social and community service. He held strong sympathies for victims of injustice—he was a friend of the underdog, the working poor, the downtrodden. He was exceedingly fair minded and charitable, and he gave much aid anonymously to many community agencies and people down on their luck. In demeanor, he was a gentle, polite, positive man who practically never swore or spoke ill of anybody, not even his critics. No one in the psychology department ever saw him angry, frustrated, depressed, or upset. He enjoyed scientific bull sessions with colleagues and students. He loved life, music, games, and having fun with his family and friends. For psychology, he has left a wonderful legacy of his work and writings; for his students and colleagues, he has left mellowing memory albums filled with lovable, personal images. He will be sorely missed by the profession and especially by all who knew him.

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