

## Martin T. Orne (1927–2000)

Martin T. Orne, one of the world's foremost authorities on hypnosis, an expert on the social psychology of the psychological experiment, and a leading figure in behavioral medicine, died of colon cancer on February 11, 2000.

Orne was born in Vienna, Austria, on October 16, 1927; his father, Frank Orne, was a surgeon, and his mother, Martha Brunner-Orne, was a psychiatrist. In 1938, the family escaped the Nazi *Anschluss* and immigrated to the United States. On graduation from high school, Orne entered Harvard College, but when he turned 18, he enlisted in the U.S. Army, spending the last year of World War II screening soldiers for administrative discharge. He then returned to Harvard, pursuing his major in the Department of Social Relations, an interdisciplinary enterprise combining psychology, sociology, anthropology, and other social sciences. He studied with Robert W. White and Henry A. Murray and graduated cum laude from Harvard in 1948.

After a postgraduate year at the University of Zurich, Orne returned to Harvard for graduate work in clinical psychology. During that time, however, he realized that the kind of research he wanted to do required training in medicine as well as psychology and other social sciences. Accordingly, after finishing his course requirements, he enrolled in Tufts University Medical School and completed his medical training in 1955. After his medical internship at the Michael Reese Hospital in Chicago, Illinois, Orne moved to the Massachusetts Mental Health Center (MMHC), first as a Public Health Service Research Fellow (working with Richard Solomon on applications of learning theory to abnormal behavior) and then as a psychiatric resident. During that time, he completed his doctoral dissertation and received his doctor of philosophy degree in 1958. White again served as his advisor.

After completing his residency in 1960, Orne continued as Senior Research Psychiatrist at MMHC, where he established the Hypnosis Research Project, and taught at Harvard Medical School. In 1964, Orne moved his laboratory to the University of Pennsylvania, where he held appointments in both psychiatry and psychology. Orne's laboratory, renamed the Unit for Experimental Psychiatry to underscore the broadened scope of his research interests, was located initially at the Institute of Pennsylvania Hospital, at which he also served as Senior Attending Psychiatrist. In 1995, following reorganization of the Institute, the Unit for Experimental Psychiatry moved to the medical campus of the Univer-

sity of Pennsylvania. At the time of his death, Orne was Professor Emeritus in the Department of Psychiatry and Adjunct Professor Emeritus in the Department of Psychology.

Orne's primary research interest was the objective study of subjective states of mind. Although he conducted important research on psychophysiology, lie detection, biofeedback, and sleep, he was best known for his research on hypnosis. His doctoral dissertation, published in 1959, largely defined the field of hypnosis research for more than 20 years, and his studies of analgesia, antisocial behavior, and human performance are regarded as classic contributions to the field. Although some colleagues classified him as a traditional "state" theorist, others classified him as a skeptic. In fact, Orne held a complex, nuanced conception of hypnosis that transcended black-and-white categorization by taking both subjective private experience and objective public behavior seriously. He coined the term *trance logic* to describe the behavior of hypnotized subjects, who appeared to display (borrowing the language of the Cold War) a peaceful coexistence between illusion and reality. Orne also introduced the real-simulator paradigm to separate the "artifact" from the "essence" of hypnosis. In his view, the internal cognitive changes associated with hypnosis were no less real even if they were contradicted by some aspect of the subject's behavior or were shaped by external social circumstances. These contradictions only made them more interesting.

From 1961 to 1992, Orne served as Editor in Chief of the *International Journal of Clinical and Experimental Hypnosis*. During his tenure as editor, the journal became the leading one for hypnosis research, with a citation count placing it in the leading ranks of journals in psychology and medicine. Orne was a model editor who took a proprietary interest in his journal and used it to advance the field. Whereas many editors merely give a passing or failing grade to whatever crosses their desks, Orne actively solicited interesting material, encouraged authors to submit their manuscripts, and worked tirelessly with them to sharpen their ideas and analyses. The goal was not to accept or to reject but to publish the paper, once it was as good as it could possibly be. Acceptance letters often contained suggestions about possible subsequent research. When a study was fatally flawed, he filled his rejection letter with advice about how to make the next study better.

Largely on the basis of his experience with hypnosis, Orne developed a provocative analysis of the psy-

chological experiment as a distinctive social situation, one in which both subjects and experimenters, among others, are active participants. In his interpretation, research subjects are sentient beings who seek to understand the situation they are in, and this understanding is shaped by the demand characteristics of the experimental situation. The special demand characteristics of laboratory experiments, moreover, threaten their ecological validity; researchers cannot generalize their findings automatically to the real world outside the laboratory. Orne was unhappy that some colleagues used demand characteristics and ecological validity to undermine experimental social psychology nihilistically. Yet his insistence on understanding the experiment from the subject's point of view was a precursor to the establishment of the cognitive perspective within social psychology and influenced the development of linguistic theories of conversational pragmatics.

Trained as both a researcher and a clinician, Orne never acquiesced to a split between science and practice. He insisted that the clinical uses of hypnosis and other behavioral techniques be firmly grounded in empirical research. Early in his career, he promoted hypnosis as a technique for pain control and explored its other applications in what is now known as behavioral medicine. Later, Orne became a prominent contributor to the debate over the use of hypnosis to recover forgotten memories of trauma. On the basis of laboratory research, he argued that hypnotic suggestions could lead to confabulation and inflated confidence and that memories recovered in hypnosis required independent corroboration. He also warned that the epidemic of dissociative disorder in the 1980s and 1990s might have been stimulated by therapists' inadvertent suggestions.

Orne served as an expert witness in several legal cases related to hypnosis, including the trial of Patty Hearst. His evaluation of Kenneth Bianchi, the accused "Hillside Strangler" who offered a multiple-personality defense, was the subject of an award-winning BBC documentary. His critical perspective on forensic hypnosis influenced more than 30 state supreme court decisions as well as the United States Supreme Court, and the Orne guidelines for forensic hypnosis were adopted by the Federal Bureau of Investigation.

Orne brought the same social-psychological analysis to clinical practice that he did to laboratory research. In his conception, patients are not passive recipients of the doctor's ministrations but are active, thoughtful participants in their own treatment. His concept of demand characteristics led him to propose that anticipatory socialization, in which patients were explicitly informed of how their treatment would proceed and what was expected of them, would facilitate progress and improve the outcome in psychotherapy. For the same reason, he taught medical students to be aware of subtle cues conveyed by nonverbal behavior during physical and men-

tal examinations. On the basis of his view that placebo effects were active psychosocial components in every treatment, he proposed that patients' effective hope, or their belief that they would get well, was an active ingredient in successful psychotherapy.

Orne's interpretation of patients as partners in their own treatment led him to explore new ideas in professional ethics. One of his patients, the poet Anne Sexton (her poem "You, Doctor Martin" begins with the lines, "You, Doctor Martin, walk / from breakfast to madness"), often forgot what she had said in prior sessions. Rather than pursuing the psychodynamics of the forgetting, Orne simply made audiotapes of each session for her to review before the next one. When, following the poet's explicit encouragement and with the permission of her daughter and literary executor, Orne made these tapes available to Sexton's biographer, he was criticized by some people for violating patient-therapist confidentiality. In an op-ed piece in *The New York Times*, which had joined the criticism, Orne argued convincingly that patients have the right to control the disposition of their own medical records ("The Sexton Tapes," *The New York Times*, July 23, 1991).

True to his formative years in Harvard's Department of Social Relations, Orne was a vigorous proponent of interdisciplinary approaches to basic and applied research and argued the benefits of theoretical and methodological pluralism in approaching problems of human behavior. He was a member of the Group for the Advancement of Psychiatry, which sought to bring psychosocial theories to bear on problems of mental illness as a counterweight to the biomedical emphasis prevailing at the time. In 1961, Orne established the Institute for Experimental Psychiatry Research Foundation, a public charity that promotes interdisciplinary research on the role of mind and behavior in health, well-being, and safety, and served as its executive director until 1999.

During his career, Orne received many honors, including honorary membership in the Royal Society of Medicine, the Distinguished Scientific Award for Applications in Psychology from the American Psychological Association (1986), and the Seymour Pollack Award from the American Academy of Psychiatry and the Law (1991); he was also named a James McKeen Cattell Fellow in Applied Psychology by the American Psychological Society (1992). Among many honors recognizing his contributions to hypnosis research was the Benjamin Franklin Gold Medal from the International Society of Hypnosis (1982).

Orne is survived by his wife and longtime collaborator, Emily Farrell Carota Orne; their two children, Franklin Theodore Orne and Tracy Meredith Orne; and a brother, Peter Orne.

*John F. Kihlstrom*  
*University of California, Berkeley*