

IN MEMORIAM: *Frederick J. Evans, 1937–2006*

Frederick J. Evans, one of the leading figures in the “second golden age” of hypnosis research in the 1960s and 1970s, died on February 23, 2006, at the age of 68. The cause of death was complications of endocarditis.

Evans was born November 17, 1937, to the late Frederick and Phyllis Evans, was educated at the University of Sydney and served as an officer in the Australian armed forces. Even before he took his Ph.D., in 1966, Evans traveled to the United States on a Fulbright Scholarship to work with Martin Orne in the Studies of Hypnosis Project at Harvard Medical School. Evans later moved with Orne to the University of Pennsylvania in 1966, where he eventually became associate director of Orne’s Unit for Experimental Psychiatry at the Institute of Pennsylvania Hospital. He also was appointed adjunct professor of psychology and of psychiatry at the University of Pennsylvania. In 1979, he left Penn to become director of research at the Carrier Clinic. In 1987, he entered private practice as president of PATHFINDERS: Consultants in Human Behavior, in Belle Mead, New Jersey. He also served as adjunct professor of psychology in psychiatry at the Robert Wood Johnson Medical School of Rutgers University.

By the early 1960s, hypnosis was becoming well established in Australia. Ainslie Meares, a Melbourne psychiatrist, had introduced clinical hypnosis, playing much the same role in Australia as Milton Erickson did in America. On the experimental side, J. P. Sutcliffe and A. Gordon Hammer established a prominent research group at the University of Sydney. Many members of the Sydney group became distinguished contributors to the field, including Peter W. Sheehan, Campbell W. Perry, and Wendy L. Walker, in addition to Evans himself. Working primarily with Hammer, Evans’s early work focused on individual differences in hypnotizability, including a pioneering factor analysis that yielded the first evidence for special factors within hypnosis. Other studies questioned the relationship, originally postulated by Eysenck and Furneaux, between hypnotizability and various combinations of the “Big Two” personality traits, neuroticism and extraversion. Evans also developed a standardized technique for the indirect induction of hypnosis; his questionnaire measure of everyday “trancelike” experiences anticipated later work on absorption.

In 1967, Evans published a groundbreaking review of the literature on waking suggestibility, which challenged Eysenck's distinction between primary and secondary suggestibility. With the advantage of hindsight, we can identify this paper as the foundation for the more recent revival of research interest on various forms of suggestibility observed of hypnosis. In his later years, Evans returned to the subject of individual differences in hypnotizability. Working with Helen Pettinati, he studied differences in hypnotizability among diagnostic groups. Evans believed that hypnotizability might play a predispositional role in certain forms of psychopathology as well as moderate patients' response to psychotherapy. Accordingly, he encouraged clinicians to assess hypnotizability in their patients, even when they were not contemplating hypnotherapy.

The Orne-Evans collaboration was extraordinarily fruitful, yielding several of the classic studies of hypnosis to emerge in the 1960s. During Orne's visit to Sydney, for example, Evans was the research assistant who cajoled subjects to pick up poisonous snakes and to retrieve pennies from fuming acid; he was also the target when it was suggested that they retaliate for these "indignities." The study revealed just how difficult it is to carry out a convincing test of the power of hypnosis to induce antisocial and self-injurious behavior. Other studies revealed subtle artifacts infecting studies of the transcendence of normal voluntary capacity and (with Sheehan) established that posthypnotic suggestions could be executed outside the hypnotic setting. Two studies of the "disappearing hypnotist" serve as exemplars of how the real-simulating technique can be used to evaluate the demand characteristics in psychological experiments.

Evans also carried out an influential program of research on posthypnotic amnesia, documenting both the reversibility of suggested posthypnotic amnesia and a sort of residual amnesia persisting after the amnesia suggestion was canceled. Among his methodological innovations was the use of partial response to amnesia suggestions as a vehicle for uncovering mechanisms by which memory retrieval was disrupted in the more complete case. In research conducted with John Kihlstrom and Helen Pettinati, Evans showed that amnesic subjects had restricted access to contextual cues, including the temporal sequence of suggestions and the subject's own response to them, which serve important functions in normal memory retrieval. An early paper, written with Wendy Fairfax Thorn, a student colleague from Australia, showed that amnesic subjects could remember facts learned during hypnosis, even though they did not remember the learning experience itself; a later paper showed that this "source amnesia" distinguished real hypnotic subjects from simulators. The phenomenon was later documented in other forms of amnesia as well. While most

hypnosis research borrows methods and concepts from the rest of psychology, source amnesia was an early example of what we have now come to recognize as “implicit” memory. As such, source amnesia stands almost alone as a salient contribution of hypnosis research to our understanding of the cognitive neuropsychology of memory.

Evans united science and practice with his career-long interest in pain and in its alleviation by psychological techniques—techniques that included, but went beyond, hypnosis. He became a widely cited authority on the placebo response and on pain control generally. In a classic study performed with Thomas McGlashan, he and Orne convincingly dissociated hypnotic analgesia from placebo responding: hypnotizability predicted response to analgesia suggestions but not to placebo. A later study revealed that the effect of placebo analgesia was a constant fraction of the effect of the active medication to which the placebo was compared: placebo aspirin was roughly half as effective as real aspirin, and placebo morphine was roughly half as effective as real morphine. The analysis indicated that beliefs and expectations played a rather specific role in modulating response to biological interventions—as such, it is a landmark study in psychosomatic medicine. While most clinical-trials studies seek to demonstrate that the treatment in question is “not just” a placebo, Evans understood that placebo response was an important element in the psycho-social context of treatment. From his point of view, every active treatment—including hypnosis—had a placebo component, which can be capitalized on to improve treatment outcomes.

Evans was also an important contributor to the literature on sleep. Although most sleep researchers focused on the physiology and psychophysiology of various sleep stages, Evans argued that the psychological and behavioral aspects of sleep should be studied as well. From his point of view, sleep was not just the product of endogenous biological rhythms—it was behavior. Accordingly, Evans took a great interest in the self-regulation of sleep and in the role that hypnosis and hypnotizability might play in the treatment of sleep disorders. Together with others in Orne’s laboratory, he pioneered the study of daytime napping, introduced the distinction between “appetitive” and “replacement” napping. A study performed with William Orchard suggested that sleep learning might be possible after all, so long as the learning is characterized as semantic, or perhaps implicit, in nature. A more extensive (and controversial) series of studies explored the possibility that subjects could respond to hypnosis-like behavioral suggestions while remaining asleep. Taken together, these studies can be viewed as pioneering attempts to explore the role of sleep in learning and memory.

As happens with even the most productive researcher, a number of important findings went unpublished. In a study of the Harvard

Group Scale of Hypnotic Susceptibility, Evans and William Mitchell discovered that subjects seated next to each other scored significantly more alike than one would expect by chance. However, these same neighboring dyads did not score more alike when tested individually in a subsequent session. Subjects who were presumptively influenced by their neighbors did not differ in hypnotizability from those who were not. However, neighbor influence did disrupt the correlation between the group-administered scale and scores on the individual Stanford Form C, administered subsequently. Evans and Mitchell construed this pattern as reflecting a kind of “social contagion” effect—a form of social influence that is independent of, but nevertheless confounded with, the effects of hypnosis and hypnotizability per se.

In another study, Evans and Maribeth Miller gave subjects the suggestion that the integer six would disappear from their number systems and then posed an arithmetic exercise problem in which sixes abounded—in the problems themselves, in the solutions, and the steps in between. Blind ratings of the subjects’ performance revealed that real subjects tended to employ a “blocking” strategy, in which the sixes were treated as if they simply were not there. By contrast, simulating subjects employed a more “logical” strategy of converting sixes to sevens or zeroes. In the context of Evans’s work on posthypnotic amnesia, this experiment can be viewed as a pioneering study of hypnotic agnosia—a suggested impairment of semantic, as opposed to episodic, memory.

Evans’s contributions to hypnosis were honored by several awards from the Society for Clinical and Experimental Hypnosis, including the Henry Guze Award for Best Research Paper (1974 and 1978) and the Arthur Shapiro Award for Best Book on Hypnosis (1980). He served on the editorial boards of the *American Journal of Clinical Hypnosis*, *Australian Journal of Clinical and Experimental Hypnosis*, and *International Journal of Clinical and Experimental Hypnosis*. He was elected president of Division 30 (Psychological Hypnosis) of the American Psychological Association, the Society for Clinical and Experimental Hypnosis, and the International Society of Hypnosis.

Fred Evans was a distinguished contributor to the hypnosis literature who merged the laboratory and the clinic, cognitive and social psychology, and experimental and psychometric methods into a seamless web of research and application. His first marriage, to Barbara J. Marcelo Evans, ended in divorce. A son, Mark Evans, died before him. He is survived by his wife, Patricia “Pepper” Evans, of Lawrenceville, New Jersey; three daughters, Diana, Mariefred, and Ellen; two sons, Christopher and David; and his brother, Reginald.

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