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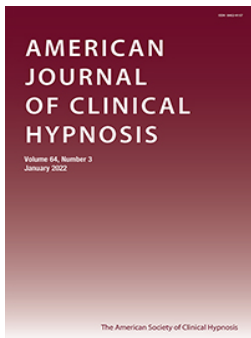
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“Everything has been done at some time or another...” An Interview with Ernest Hilgard

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ABSTRACT

Ernest R. Hilgard is not only one of the most important hypnosis theoreticians and researchers in history, but one the most eminent psychologists of the 20th century. This paper starts with a brief summary of his contributions to hypnosis, emphasizing his dissociation theory, and placing it within previous and later dissociation theories of hypnosis. I then transcribe an interview with him circa 1989, which I recorded with his authorization for later use, emphasizing dissociation in hypnosis. He also reminisced about historical figures in psychology.

Ernest R. Hilgard is not only one of the most important hypnosis researchers and theoreticians in history but has been listed among the 30 most eminent psychologists of the 20th century (Haggblom et al., 2002). He contributed mightily not only to the study of hypnosis and dissociation with, among others, his wife Josephine (e.g., Hilgard & Hilgard, 1983), but to learning and memory (e.g., Hilgard & Bower, 1975) and the history of psychology (Hilgard, 1987). This is not the place to give a full appreciation of his work, the reader can consult various other sources for that (e.g., Bowers, 1994; Crawford, 2002; Kihlstrom, 2002; Leary, n.d.). From 1988–1991 I was a Postdoctoral Fellow and Visiting Scholar at the Department of Psychiatry and Behavioral Sciences, at Stanford University and, after a meeting to discuss possible changes to the DSM-IV diagnostic criteria for the dissociative disorders (cf. Cardeña, Lewis-Fernández, Bear, Pakianathan, & Spiegel, 1996), I met him at his office for an interview on his views of hypnosis and dissociation.

Before proceeding to the transcription of the interview, some comments on Hilgard’s contributions to hypnosis, including his dissociation theory of hypnosis, will contextualize the interview. It is undeniable that the fact that someone of his stature, Full Professor in one of the top departments in psychology in one of the top universities in the world, would focus his research activities on hypnosis did much to enhance the scientific status of the topic and make it respectable and “safe” for other academics to consider. This can only be compared to the interest in hypnosis stirred by perhaps the foremost neurologist of his time, Jean-Martin Charcot, who established “hypnotic phenomena as a legitimate subject of scientific inquiry” at the end of the 19th century” (Gauld, 1992, p. 306), and to the agenda for research on hypnosis published by Clark L. Hull (1933), Professor of Psychology at Yale University and a historical figure in his own right.

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Already established as a world authority in learning, Hilgard focused on hypnosis in the 1960s, continuing his engagement for decades. With his associates, he developed a research program that has continued to our days. A foremost contribution was to develop individual hypnotizability tests, including, in collaboration, what is considered the “gold standard,” the Stanford Scale of Hypnotic Susceptibility, Form C (Weitzenhoffer & Hilgard, 1962) as well as the more demanding Profile Scales (Hilgard, 1963), which I have used in my work repeatedly (e.g., Cardeña, 2005) and believe should be employed much more. Hilgard found that there was a slightly non-normal distribution of hypnotizability, which usually remains fairly stable across decades (Piccione, Hilgard, & Zimbardo, 1989). In a summary of hypnosis research, both his and others’ (Hilgard, 1965), he discussed: the nature of hypnosis and its induction; behavioral and experiential changes after induction and suggestions (and described hypnotic-like experiences outside of hypnosis); and the relation of hypnotizability to various demographic, personality, and diagnostic variables. In collaboration with his wife Josephine R. Hilgard, who was the main author in this topic, he explored developmental and clinical aspects related to hypnotizability (e.g., Hilgard & Hilgard, 1962).

With respect to dissociation, before Hilgard it had been a concept that had largely been discontinued in academic psychology, after an initial high interest at the end of the 19th and early 20th centuries from foundational figures such as Bechterew, Janet, Myers, Prince, Sidis, and others (Hilgard, 1986, 1987; Spiegel & Cardeña, 1991). There were many reasons for the loss of interest in dissociation, including the rise of behaviorism and psychoanalysis early in the 20th century (Hilgard, 1986; Nemiah, 1989). Another problem was the interpretation that dissociated material (e.g., dissociated memories) did not interfere with conscious reports or behavior, something that Hilgard saw as an exaggerated interpretation of early accounts. In any case, dissociation as a topic of cognitive and clinical inquiry mostly remained inactive until the 1980s, when various movements converged, including: the recognition of dissociative (instead of, as earlier called, “hysterical”) disorders in the DSM taxonomy (e.g., American Psychiatric Association, 1987); research on posttraumatic conditions including PTSD, which often involve dissociative phenomena such as flashbacks and functional amnesia, the integration of psychoanalytic and dissociative accounts (e.g., Erderlyi, 1985), and the development of cognitive psychology and models of parallel processing. Hilgard integrated the latter into his neodissociation theory of hypnosis to explain the curious sense of involuntariness or decreased sense of control, a cardinal aspect of hypnotic experience (Cardeña & Spiegel, 1991; Weitzenhoffer, 1980).

For Hilgard (1986, 1994) the mind functions according to hierarchical cognitive control structures, at the top of which there is a Central Control Structure or Executive Ego. Under most circumstances, this structure controls mental processes and behaviors, but some contexts, including hypnosis, can place constraints on ego autonomy, for instance by having the suggestions of the hypnotist partly replace it. In a variation of this model proposed by Woody and Bowers (1994), the weakening of higher executive functioning resembles a mild version of frontal lobe dysfunction, revealing the “underlying ‘multifarious’ architecture of the mind” (p. 53); according to them, dissociated *control* rather than dissociated *experience* or *monitoring* ensues after hypnosis (see also Kihlstrom, 1998). Based partly on Hilgard’s original formulation, other alternative recent dissociative accounts of hypnosis include the Integrative Cognitive Theory (Brown & Oakley, 2004), and the Cold Control and Discrepancy-Attribution models (Barnier, Dienes, & Mitchell, 2008).

In the interview below, Hilgard also was inching toward a consideration of heterogeneity in the processes underlying hypnotizability, an idea that another great figure in hypnosis and Hilgard's theoretical worthy adversary, T. X. Barber, developed (e.g., Barber, 1999), and for which there is converging evidence (e.g., Pekala, 1991; Terhune & Cardeña, 2010; Terhune, Cardeña, & Lindgren, 2011).

What follows is a slightly edited (deleting most interjections and repetitions, excising one lapsus he committed and would have likely corrected, as well as a couple of small passages with sensitive speculations, using ellipses for inaudible sections, but otherwise a faithful transcription) annotated transcription of our warm conversation, which had many shared laughs. I am grateful to Professor Hilgard for having given me this opportunity. I hope that the readers who have not already done so will take this as an invitation to read first hand his foundational contribution.

Cardeña: (Can you tell me about your interest in dissociation?)

Hilgard: The main source of my interest in the dissociation thing was through the studies we did of the "hidden observer."¹ That empirical basis is perfectly good, other people have substantiated it, and have been criticized by some, by Spanos and so on . . . but that is not important. But the difficulty of that is that evidence comes only from very highly hypnotizable people, one in a hundred, maybe. From extrapolation but it is like finding a two-headed cat, you do not have to find one in everybody's barn, you know that once you find one is important

Cardeña and Hilgard: (both laugh)

Hilgard: Nevertheless, you shouldn't say that the two heads are implicit in every task (laughs). The phenomenon is real but to overstate it and feel that this is something that could be brought out in anyone if one knew how to do it . . . would be like talking about the universal unconscious or something. You need to have more evidence than just the most striking cases. On the other hand, there are many illustrations of that type of division of attention, if you wish, that occur, and I'd like to put it in terms of control mechanisms more than worrying about states of consciousness or something. For example, I like to think of a dream as a dissociative thing because the dreamer is not aware that he is the stage manager of the dream. It's happening, it is not whether it's conscious or unconscious, it is conscious if one is able to recall it, What Freud called the dreamwork, that's the part that's unconscious, not the dream itself, and you have to dig around to see if you can find some reason, day residues or anxieties or what not that produces the content of the dream. So, if one accepts that or if one accepts other familiar things in hypnosis such as amnesia, where you consciously can't control something, but then under other circumstances it can be recalled so you know it is there. What's interesting from the dissociation point of view is again, the controls, what circumstances signal amnesia. Nevertheless, it makes a difference from ordinary memory in which ordinary memories are available, or partially available, and sometimes continuous, where you cannot trigger a thing like that so much.

¹This refers to the observation of a few very hypnotizable people who initially report no awareness of, for example, pain during hypnotic analgesia, but nonetheless report when probed through other means such as moving a finger that a part of them is aware of the pain. Hilgard describes the phenomenon in various sources (e.g., Hilgard, 1986, 1994). The idea behind this phenomenon can be traced back at least to Myers (1903), who wrote of a *subliminal* supervision by patients with "hysterical anesthesia" preventing them from injuring themselves in the apparently insentient limb.

Cardeña: Let me query you, since you are talking now about memory . . . Recently there has been a number of proposals that there are different processes of memories, semantic versus episodic, data driven versus conceptual driven, and so on and so forth.² I think that you have given a lot of importance to memory conceptualization of dissociation . . . do you see if there is a particular relevance of these recent division or categorization of different processes of memory.

Hilgard: (Laughs) They aren't so recent you know

Cardeña: Well, you are the historian, so please allow me . . . (laughs)

Hilgard: They were described by 19th century people. I have it in my early textbooks of psychology before it got popular. I thought of being common sense that everybody knew that there were autobiographical memories and dictionary memories . . .

Cardeña: Who was proposing this in the 19th century?

Hilgard: . . . It was common sense, really . . . Atkinson brought it up since '95, it was in my introductory textbook before it got popular³ (laughs) I had thought of it as being sort of common sense . . .

Cardeña: We rediscover common sense in psychology all the time (laughs)

Hilgard: That's more a matter of substance, the control process there, of course it might be, if you take some kind of a dynamic theory of Freud or something, you may get more impressions, for example, amnesias commonly are personal experiences, not how to make change. In a fugue, and this is what ties it into the abnormal of course, in a fugue a person goes about his business, he goes to a store, makes change and he does all those things but he has lost his personal identity somehow. All of that fits this categorization of memory, the personal memory is gone, but the episodic memory is not. But the acquisition of language is an early thing that's retained, so I think this matter comes up all the time in artificial intelligence and this sort of thing . . . about some kind of executive, hierarchy function. Described as control, in old cybernetics and so on . . . But in the hidden observer thing what we really had to do was to summon up, fractionate the things inhibited under hypnosis and the things that are not, and the kind of amnesia under hypnosis that could be relieved and it turned out to be something a little bit different. You are familiar with that.

Cardeña: Yes.

Hilgard: I haven't moved much beyond that . . . how much generalization (inaudible) diagnostic problems in psychiatry . . . although, I think, a possible emphasis on the control system might be of some interest.

Cardeña: Let me ask you a historical question now. In divided consciousness you chronicled how at the beginning of the century, end of last century, there were a lot of very important contributions in dissociation and they were not carried on for

²Perhaps most influential around that time was the work of Endel Tulving (e.g., 1985).

³The reference to Atkinson almost certainly refers to various editions of the *Introduction to Psychology* coauthored with Rita L. Atkinson and Richard C. Atkinson. As far as a discussion of episodic versus other types of memory about a century earlier, an important example is Claparède (1911/1995).

a number of decades. Now I sense that in the last 10 years or so maybe even in the last 5 years dissociation has actually become big. A dissociation journal, people talking about dissociation and so on, do you have a perspective of why it is that we are rediscovering it?

Hilgard: Well, I think that the great prominence of psychoanalysis had something to do with it and it had an alternative explanation called repression, and that was the guiding theory for years. People from different schools of psychoanalysis. But they were mostly arguing about the Oedipus Complex, and not the importance of the unconscious mechanisms . . . they covered some of the ground similar to the grounds covered in dissociation. They had ideas . . . they had latent content about dreams, just the difference between the latent and manifest content, and the dissociation is between the latent and the manifest content and then the impulsive action, which is another form of loss of control. Freud put it as AOB [abbreviation for things that should be discussed but are not in the agenda?] . . . primary and secondary process, if you wish, I guess . . . sometimes primary and secondary process, control . . . impulsive action, and there was the impulsive action . . . causes of action, all sorts of desired results . . . not a perfect distinction. We do not have much of a theory of the will, but we have a theory of abulia

Cardeña and Hilgard: (both laugh)

Hilgard: Now, the simpler dissociation is between trying to do two things at once. Those are studies by cognitive psychologists, you know, to some extent. Look at simultaneous translation . . . when a person is listening on the one hand and following up or shadowing, those things, really practicing⁴ . . .

Cardeña: Let me come back, you were mentioning that part of the reason that dissociation was not commented on for many decades was because of the importance of psychoanalysis, but why would it be that recently dissociation has gained favor?

Hilgard: Because psychoanalysis is in the doghouse and people are looking for anything, and there isn't any contemporary theory in psychiatry. Is there any theory that is worthy?

Cardeña: I don't think so. Although the paradoxical thing is that, at least in my perception, psychoanalysis has actually been in the doghouse for a number of years and recently some people have started taking it seriously because of the talk about parallel processing and the number of possible mechanisms that could be going in darkness

Hilgard: Yeah, I do not know enough about contemporary psychiatry, but it seems to me that I would know if some figures were coming into real prominence. Adolf Meyer⁵ for example, is someone, he was nominally in the psychoanalytic society, but he was a psychobiologist really, started the mental hygiene movement, and that sort of thing. But he was kind of a god of psychiatry for a long time. Then Freud or some

⁴The distinction between controlled and automatic information processing, mentioned by Hilgard (1986) is discussed in detail in Schneider and Shiffrin (1977).

⁵Adolf Meyer (1881–1929), President of the American Psychiatric Association and psychiatrist-in-chief of the Johns Hopkins Hospital, advocated a bio-psycho-social approach to psychopathology.

Freudians, different people Franz Alexander,⁶ Erik Erikson⁷ I don't know of any figures like that now, anybody that everybody turns to when . . . in the modern, who are the thinkers in psychiatry? Now there is Irvin Yalom.⁸ Yalom is the thinker in the department (laughs).

Cardena: Yeah, but there is no theory there, the theory of no theory. The only one I can think of is Mardi Horowitz⁹ who is sort of re-vamping psychoanalysis

Hilgard: Oh yes,

Cardena: but it is not a new theory.

Hilgard: No . . . he got a big McArthur grant to study this and all of the people associated with that and all of this . . . can't do anything with it . . . but he is thinking, that's true. And I guess there is Pollock¹⁰ in Chicago doing some thinking which nobody pays much attention to, he is in the Chicago psychoanalytic Institute that no one here pays much attention to.

Cardena: There is not very much hope for a possible integration of psychology, we will just continue disintegrating into smaller and smaller subfields?

Hilgard: Yeah, the idea of a dynamic psychiatry is a good idea. They are citing Freud now (laughs). It wasn't a very good therapy that was one of the difficulties and it . . . curiously and in some curious way it rationalized itself out, but it really wasn't its purpose, therapy . . . But to gain a better understanding of ourselves, I suppose there is something to be said for that. As long as you know you are crazy, that's of some help (laughs)

Cardena: Well, I think we haven't come to grips with the notion of being sick and being healthy and I think another aspect that you were mentioning earlier that I think is very true and has not been paid attention to is any kind of theory of will.¹¹

Hilgard: Yeah.

Cardena: Because if we had a theory of will, I think we might not only mention that a person has understanding but why a person decides to go along with what is a stupid, immoral, unethical decision.

Hilgard: I don't blame just psychiatry, psychology has been very bad on that issue and while there are little things emerging, the Miller and Pribram book¹² was close to it, plans at least but the whole theory of motivation, the Nebraska Symposium, that's a very interesting thing . . . they have a symposium every year on motivation . . . the real argument then was essentially two camps. One approach by way of physiological needs, (inaudible) . . . deprivation needs . . . hunger needs And the other approach was the psychoanalytic

⁶Frans Alexander (1891–1964), pioneer of psychosomatic medicine.

⁷Erik H. Erikson (1902–1994, psychoanalytically-oriented developmental psychologist, ranked 12th among the top 20th century psychologists (Haggbloom et al., 2002).

⁸Irvin D. Yalom (1931- . . .), Professor Emeritus of psychiatry at Stanford University and existential psychotherapist.

⁹Mardi Horowitz (1934- . . .), Distinguished Professor of Psychiatry at UCSF, has developed a psychodynamic approach to posttraumatic symptoms and grieving.

¹⁰George H. Pollock (1923–2003), President of the American Psychiatric Association and Director of the Institute for Psychoanalysis in Chicago.

¹¹See Hilgard (1980).

¹²Actually Miller, Galanter, and Pribram (1960), a fundamental text for cognitive psychology.

theory in one form or another . . . Murray,¹³ a deviant psychoanalyst in some way but he was nevertheless in that side of the fence, and then they finally found that they couldn't get any speakers for that and they continued to think that if they just had something and motivation just dropped out of it . . . I guess they are still calling that series . . . but the single volume has some other name, probably something with psychology.

Cardeña: I think they still publish under Nebraska Symposium on Motivation,¹⁴ but the content of it is . . .

Hilgard: It can be anything . . . I think that is a serious thing. I can't think of any more important problem than why we do what we do, but that's alright, that is willing and non-willing in a sense so maybe that's just like memories are personal and motivations are personal. It is easy enough to talk about proper behavior. It is not hard to talk about.

Cardeña: How to do it, how to go about in society.

Hilgard: Oh well, about dissociation . . . I guess the two conflicting things that I somehow sense . . . one, attempting to do it by levels, that's one thing, deeper levels . . . Conscious, unconscious, and so on, or even super normal . . . interpersonal . . .

Cardeña: Transpersonal?

Hilgard: Transpersonal, that kind of approach. And another thing is the major splits, that multiple personality thing that pulls me a lot, really. I thought the discussions about that in the book are quite interesting. I have great respect for Kluft,¹⁵ as he taught there and his writing. He seems to be trying to work at it seriously.

Cardeña: He does and is very committed to.

Hilgard: But, I suppose, the why things happen, one symptom of what's happening is the proliferation of multiple personalities but that is a massive dissociation if there is one, (laughs) So and there again the problem of control is . . . often have a battle apparently of what is going on . . . between them . . . the domination of the person kind of hard . . . to read . . . case studies . . . It is hard to see what is in control. Have you run into that at all?

Cardeña: Certainly, yes, I interviewed a person who actually approached me because she was looking for a therapist, and I was not doing therapy but was in a study group, and I ended up talking to her for about 4 hours. She was a very pleasant, graduate student of psychology, incidentally. And as we were talking about it, I was particularly taken by what I thought was a real honest attempt to get some understanding of her condition. Because she was honest, for example saying that she sometimes even doubted about her being a multiple, that she would question herself whether she was somehow role acting all of this or what was happening. And I of course, always hold more respect for people who consider alternative explanations. Despite it all, I think she was very genuine in her real attempt to try to understand that somehow in her experience there were different voices, not a regular one acting against the other but real different voices making decisions and having problems, making decisions and having dissociated episodes in which she might relive some of her

¹³Henry Murray (1893–1988), co-creator of the TAT and one of the most important personality theoreticians.

¹⁴The Nebraska Symposium on Motivation was first published in 1953 and continues to our days.

¹⁵Richard P. Kluft (1943- . . .), an authority on dissociative disorders and hypnosis.

experience of abuse and so on. Incidentally, her chronicle of abuse was very heart-wrenching. I felt that if even one-tenth of what she was saying was true, it was a terrible childhood, even if it was one-tenth.

Hilgard: Isn't that something universal, and they tend to be highly hypnotizable . . . those things may go together, child abuse tends to setup fantasies to control it . . . On the psychoanalytic things, I think that if the psychoanalysts that talk about emerging multiple personalities . . . cure it [on a] reality basis And maybe . . . possibly successful at doing that, I think, if you don't believe it, it's maybe easier to handle.

Cardeña: There is something when you look as well to the different cultures, that do not hold to a theory of "multiple personalities" where you find out some alternate ways to experiencing one's identity and that of other. I think it sort of taxes one's mind to assume that this is just a creation of the specific Western culture or something.

Hilgard: That's right . . . I mean the Balinese description.¹⁶ I think dissociative language is a mental natural language and it is descriptive of multiple personality, isn't it?

Cardeña: Yeah.

Hilgard: . . . you can talk about fractionation . . . different words to say the same things (laughs).

Cardeña: And sometimes, the problem, I think is not so much that you have very weird behaviors or experiences that you cannot see, I think the problem is that it doesn't get in contact with the other one. That you do not get the extended self that says "I was childish, but then I, the I that is speaking once was being childish-" We all are in different contexts. I think sometimes that is what is more remarkable and what is really exceptional is when people really have these florid cases of multiple personality and you have the extreme absolute extreme cases where someone becomes a killer or something.

Hilgard: Yeah, like Jekyll and Mr. Hyde. These people . . .

Cardeña: I think it would be a problem just keeping a file on that. Keeping any set of tracks . . . My sense, when I interviewed this person, she said that she had about a hundred personalities, but probing more into what she was experiencing I thought that she had about maybe 4 or 5, that were identifiable, that had a name, experience of a body, and some sort of history and that the other things were memories that had been dissociated. That she had focused on something, become dissociated from them and sort of had named that a different personality, that specific memory had gotten another name. I did not feel that it was even remotely a new personality.

Hilgard: Was John Watkins¹⁷ in this group dissociation thing?

Cardeña: I don't think he was, no.

Hilgard: Are you familiar with his writings at all?

¹⁶Probably referring to either the book by Belo (1960) and/or the documentary by Margaret Mead and Gregory Bateson (1951).

¹⁷John G. Watkins (1913–2012), psychologist, expert on hypnosis and creator of ego states therapy.

Cardeña: Yes

Hilgard: Because, I have some of his tapes and they were really quite impressive . . . one of them, kind of trying to kill the other one . . . He has a theory of egos of some sorts. He calls them . . .

Cardeña: Ego states.

Hilgard: Ego states, yeah. Ummm, that seemed a pretty plausible kind of a business.

Cardeña: This leads to a question since you are talking about multiples and ego states. One of the changes that was proposed for the DSM-IV is that amnesia is now going to be a criterion to diagnose multiple personality, which wasn't the case before. Do you remember that discussion, what do you think about it?

Hilgard: I think the reality of that discussion was whether that came early enough in the case presentation to be used diagnostically. Now, that I would not have any way of knowing . . . then I felt like they were not all present at once, did one of them know what the others did?

Cardeña: It wasn't always symmetrical, but there was some amnesia of some of what the others did.

Hilgard: I should think there would be some confusion (laugh). We all have little amnesias, I am sure, you don't remember a name and later you do. So, I guess it does seem pretty characteristic . . . I felt that was an insight . . . it's always hard to know the sequence of things . . . whether child abuse then it would be diagnostic . . . it's always associated with it . . .

Cardeña: One of the other changes that came out of that discussion was to propose that fugues do not require the assumption of a new personality, which from my review of the literature would seem to be the case. I have never talked with anybody who had a fugue, have you had any experience with fugues if so, have you looked up whether the identity . . . ?

Hilgard: No, I only remember one case reported to me while it happened, by a friend of mine, at the Oregon Alaskan Pipe. Someone got directed to him because the police had picked him up and had been really confused. He did not know who he was, or where he was from . . . And he treated him hypnotically and got enough clues about who he was and so on, but he had a lapse of memory for just intervals, and it was pretty close to a fugue, but he had gone off on some sexual escapade or something that he was thoroughly ashamed of and could not call his wife about it and he couldn't recover the memory of that episode under hypnosis but could be pieced through sociological evidence. But he finally remembered his wife's name and came out alright in the end but some memory was lost, one-minute gap . . . repression . . . Freudian So, it was pretty deeply repressed, but in the meantime he was doing quite well . . . There was a pretty good crowd back in the 1930s called persons running free . . . And Sheppard Ivory Franz,¹⁸ a distinguished psychologist from UCLA, was associated with Lashley.¹⁹ I remember this one case of multiple personality. They were successive, they were not simultaneous, there was one person at one time, another person another

¹⁸Sheppard Ivory Franz (1874–1933), President of the American Psychological Association, mostly known for brain plasticity and neurodynamics, also wrote a detailed case of "multiple personalities" (Franz, 1933).

¹⁹Karl S. Lashley (1890–1958), among the 100 most cited psychologists of the 20th century (Haggblom et al., 2002), best known for his research on learning and memory.

time. Each time he lost his memory for the previous person. Interesting study. He would carry some identification with him from the military or something, but he wouldn't recognize it. In one episode . . . he was hiding in the woods. They were being captured by the enemy and he befriended a monkey out there, as a companion . . . But then he was up in Africa, and there was a tiger or something [actually a leopard], and he made the mistake of tying the monkey at the bottom of the tree while he climbed up on the tree to sleep during the night and the animals got the monkey and . . . forgot all of that . . . So, there are different types, in a way that was successive fugues . . .

Cardeña: Is this referenced in your *Divided Consciousness* book?

Hilgard: I think so. It is, page, twenty-six . . . I don't remember these things so well (starts searching in his book, laughs)

Cardeña: Well, you are doing better than we youngsters.

Hilgard: (reading from his book) "Two main parts in which his life was cut by memory discontinuity. Memories of Charles Poultney, his correct name from birth to age 27, and then Charles Poulting, an assumed name from February 1915, to March 1930, so that was from age 28 to age 33. And then there was a little gap that may have been filled by a third personality, little is known about that. He unraveled this story by re-integrative techniques such as the use of a map to restore his memories of war time experiences taken place in Africa. Hypnosis was not used."

Cardeña: Yes, I have read it, now that you mention it. This is a tough question, how does identity come into the picture when you are talking about executives and monitoring functions of the mind that most people connect with identity?

Hilgard: Yeah, well, James²⁰ distinguished between the "I" and the "Me" . . . the "I" was your identity and the "me" were all sorts of accessory things, your possessions, your family, occupation, all those things that help to substantiate yourself as a full personality, but the real inwardness which I suppose is the will and things of that sort is the "I," he wasn't all too clear about it but . . . but that was the inward life . . . But, I think one often does, when you are the kind of person you are, you remember your conscience and so on, you don't want to lose control . . . "I am tempted to do this but it would be out of character." They talk about things in psychological amnesia, ego-syntonic . . . A really coherent picture of yourself. All this kind of stuff of the ego ideal . . . That's perhaps overemphasized, the defined values in some way. A level of aspiration versus a realistic picture . . . Yeah, I guess, one of the distinctions that needs to be made and Benedict did in her studies was the distinction between guilt and love,²¹ some great martyrs felt guilty, and . . . embarrassed . . .

Cardeña: Shame

Hilgard: Shame and guilt, those were the terms she used, the difference between the shame culture and the guilt culture. Well, you lose face, that is very important in some cultures. Well, I guess guilt is more tied up with the "I" and shame tends to go with the "me." You know, I should have worn a tuxedo and here I am in plain clothes. That is the "me."

²⁰Referring to William James's discussion of the self (e.g., in 1890).

²¹He touches on the eminent anthropologist Ruth Benedict's work (e.g., 1946).

Cardeña: Shame is more really social construction, it is a self-concept, and is analyzed by other people, how you

Hilgard: Yeah, it is the difference in some sense between the personality and the self [section with sensitive statements excised].

Cardeña: Where do you think we should be going in the studies of dissociation those of us who are interested?

Hilgard: Well, there is the kind of “chemical” dissociation type of thing . . . alcohol . . . and forgetting episodes . . . That has some kind of a name, doesn’t it?

Cardeña: State dependent learning.²²

Hilgard: Yeah, state dependent, yeah, yeah, that is a kind of dissociation.

Cardeña: Uhhh, yes

Hilgard: That’s hard to work on, very large. We could look more into let’s say the biological side of dissociation? Yeah, uhm, somehow the split-brain things²³ sort of lend themselves to I don’t know, to what? Uhm, there are two difficulties in the control processes, there in those two things if you look at it from that point of view because they certainly have some abilities that do not come out when you just study the two hemispheres separately and when you get a little more deeply into it, you see there is something there.

Cardeña: There is something very unique, there is an executive view.

Hilgard: Something that is weak, that is too weak, to bring out, other than the simpler abilitiesthey stay on each side.

Cardeña: Yes

Hilgard: Uhm, or maybe the weaknesses, maybe that is the important point of this . . . despite the strength of integrated . . . That may be what the operation did . . .

Cardeña: So, the integrator could be the executive function. Well, then the executive function is just a process that is constructed and re-constructed over time.

Hilgard: Sure, sure, yes, I am not thinking of it as a soul (laughs). But computers have, have some of the programs have this kind of a monitor . . . if the problem doesn’t get solved after so many iterations, it then tries some other direction. I guess the recovery of forgotten memories . . . I had rather hoped that some of the work in hypnosis would get us a little farther on those things.

Cardeña: Going back to memories, what becomes retrieved, and how and what side perhaps . . .

Hilgard: One of the interesting features that has come out of the hidden observer thing is its correlation with the duality of age regression . . . having observers . . . see himself as a child.²⁴ They really have that experience at the same time and you know things that that

²²For a recent review of research on state dependent memory see Radulovic, Lee, and Ortony (2018).

²³A reference to the research by Roger W. Sperry that earned him a Nobel Prize, popularized in various accounts by his erstwhile student Michael S. Gazzaniga (e.g., 2014).

²⁴See Laurence and Perry (1981).

child doesn't know, and that's tied up in some way with the hidden observer . . . I mean, and that is . . . and that is kind of the hidden observer you get experimentally, you are more likely to get it if the person has that duality experience, if you forget to do that first, so you have them both, the hidden observer and the adult. So that is one approach.

Cardeña: Do you feel that the people that do not have this dissociation, that are let's say, highly hypnotizable and are fully in regression, would they be more "deeply hypnotizable," are they in greater depth or is this really a different dimension?

Hilgard: Uhm, I tried to fuss with that in the book but I didn't get very far with it. It seemed to me that there is a concrete thing that seems possible to understand, but, if they just become the child again, I just hinted at the possibility that maybe we just don't know enough about amnesia. One of the experiments we did, a factor analysis . . . rotated and found amnesia a very important sub-skill in hypnosis. It's the capacity to make the mind blank. And Charley Tart²⁵ did kind of a wild thing now. He started that study when he was here . . . he was just asking people to try to get the mind blank, and tap whenever they had a passing thought . . . and some people were very good at that. Some people could make the mind blank and they were the people who had amnesia in hypnosis. And he didn't carry it out far enough to publish it. It just seemed to be something he ought to get around to sometime.

Cardeña: It is interesting, I think, and there have been some reports of correlations between the capacity to meditate and hypnotizability . . . there is a positive correlation.²⁶ Now I don't think it has been looked exactly in this way, but depending on the type of meditation . . . I think some types of concentration require something along the lines of not having any kinds of thoughts.

Hilgard: Yes, that's right, they tried that with no thoughts . . . One of the things we are looking for is something besides imaginative involvement or absorption to predict hypnotizability and I would guess somewhat related to amnesia, recoverable amnesia.

Cardeña: Yes, not distraction.

Hilgard: Yeah, yeah, that ought to give some clue, it is the other side of absorption and . . . negative hallucinations, . . . that side of hypnosis . . . but the other side of it is so powerful, to get rid of something, that is when you have a negative hallucination, it is not quite the same thing as a positive hallucination.

Hilgard: And even a positive hallucination can wipe out the other things if we gear it, there must be something, must be something in the system that could raise that correlation of .30 or so, between hypnotizability and absorption.

Cardeña: I had a very interesting experience with one of the people that I did the study I gave you a copy of on very highly hypnotizable people.²⁷ Before we got into the actual sessions, while we were doing some practice sessions, I asked one of them . . . I was just finding out what were their capacities and I asked one of them to, he was

²⁵Charles T. Tart (1937- . . .), former Professor of Psychology at UC Davis, foundational figure in the scientific study of states of consciousness.

²⁶See Van Nuys (1973) for the positive correlation between hypnotizability and meditation practice, but the relation between the former and mindfulness is complex (e.g., Otani, 2016).

²⁷Most of the content of the paper I gave him was eventually published as Cardeña (2005).

fully absorbed, I asked him to open his eyes, look at the room that we were in and make it disappear. And he said he was looking at the room and would make it disappear. And it took him about 5 seconds but then he said, “Okay, I’ve got it.” Actually, it was fascinating, now of course he didn’t make it disappear because I was still there but I think that in his experience he quite honestly made it go away. He became fully interested in or was totally blank or was totally absorbed in something else.

Hilgard: I have had pretty good negative hallucinations, the first the lecture room was full of empty chairs you know and . . . found that the negative isn’t exactly the same thing as a positive hallucination, different kinds of mental processes, somehow seem a little easier. It seems a little easier to think of a mouse crawling around on the table here than all of this stuff disappearing, the tabletop . . . imagine that (laughs).

Cardeña: And you know, it would go along with sources that I am thinking of, having published recently, one person that did a factor analysis, Ron Pekala, just a couple of years ago, with highly hypnotizables, found two general types.²⁸ One was the high fantasizers, and the other one was not so much high fantasy but rather a sense of being in an altered state without the associated fantasies and both groups were very highly hypnotizable, 10–12 [in a hypnotizability scale]. That might be tapping the same kind of thing we are talking about, I think that when you go into anthropological literature, I follow the literature on possession, for example. Another chap did an analysis with the Human Resource File on possession, and shamanism from many different cultures and he found again two different clusters. One was people that have magical flight, shamanic going out, seeing a panorama, another world, and so on and so forth. And then on the other side was a group of people who got possessed and had amnesia for the experience.²⁹ Of course, there is always some overlap but these were discriminated and they had two different groups.

Hilgard: I don’t know how to do that but here must be something, there must be something missing in correlational studies, they are just too low. It cannot be the only thing [absorption]. A little on the role of punishment in childhood on hypnosis. And the best explanation that we found was that, they diverted it with fantasy, but that ties it into the same, the same characteristic instead of some other kind of characteristic, but nevertheless the fantasy is a way of negating, a little different than the fantasy that is secondary, sort of.³⁰

Cardeña: It is worth pursuing, certainly, you could perhaps, assume that there are two different kinds of people or two different kinds of experiences. One which goes somewhere else, or in the other one you just blank out, being so anxious, you just get all confused, I think that is conceivable and you do not organize your memory.

²⁸A cluster analysis, actually, see Pekala (1991) and later papers by him and his coauthors.

²⁹A cluster analysis using the Standard Cross-Cultural Sample, (Winkelman, 1992). For a comparison of different types of hypnotizability with shamanic magical flight and spirit possession see Cardeña (1996).

³⁰He mentions the work conducted mostly by Josephine R. Hilgard (e.g., 1979).

Hilgard: We use two different methods of producing anesthesia and analgesia. One was to go somewhere else, a desert island, or something, swimming in the warm water, or cold water that didn't hurt, and the other was a direct suggestion that you cannot feel.³¹ And high hypnotizables could do either way, no preference, I never thought of a systematic way of describing that But, I think, of dissociation. If you have an arm up here that you thought was on your lap . . . what David Spiegel³² did in a movie . . . but this arm then becomes anesthetic, ah, that is an absorption in this experience in a way, but it tells us something, (laughs) I do not know what it tells us but seemed really dissociated . . . Ah, ah, there are all of these fragments, but do not know how they all fit together somehow.

Cardeña: No, that is very helpful, because I have been thinking somewhere along these lines and I do feel that probably we are sort of molding everyone and assuming that everyone has to have the same path. And nothing, almost nothing . . . that I have looked at is like that

Hilgard: Yeah, yeah

Cardeña: And there are different ways in which people arrive to different goals, and I assume there are at least two different ways, that have not been screened, so far.³³

Hilgard: Aha,

Cardeña: and that actually might reach a sense of dissociation, because now I have felt sometimes, that the concept has become vague or confused³⁴ in so far as it seems to include what you might call deautomatization, the microanalytical aspects of the experience . . . somewhere else, and it also seems to involve just not being in the experience, maybe we can start discriminating, which probably you will tell me was done one century ago (laughs).

Hilgard: Everything has been done in crude ways at some time or another, but, well, I don't know, I am glad to see that you are working on these things. (laughs)

Cardeña: Thank you, just one more small question, if you might indulge me. I am interested in how you look now at Morton Prince³⁵? We are going to write this article for the *Journal of Abnormal Psychology*³⁶ and since he founded it, and you have written about him, his ideas of consciousness, and multiple personality, and so on. Do you see that he has had any influence or that he should have had an influence, that he has some good concepts, important concepts that are worth mentioning?

Hilgard: Well, ah, yes, I think that he was really very prominent³⁵ in his days. I guess the, who, who was the other person, Chuck something, associated with in Boston, there, did the work on, did a lot of work on dissociation

³¹The discussion of Miller and Bowers (1993) on dissociative control versus imaginative involvement is very relevant here.

³²He refers here to the Hypnotic Induction Profile (HIP), which evaluates arm levitation and sense of control (e.g., Spiegel, H., 1977).

³³This was the main topic of a later dissertation I supervised (e.g., Terhune & Cardeña, 2010; Terhune et al., 2011), supporting the existence of more dissociative and more imaginative types of high hypnotizables.

³⁴I tried to clarify what I think are legitimate ways to use the term "dissociation" in Cardeña (1994).

³⁵Robert Yerkes (1876–1956), President of the American Psychological Association in 1917, comparative psychologist and expert in intelligence, eugenicist.

³⁶In reference to Spiegel and Cardeña (1991).

Cardeña: Sidis³⁷?

Hilgard: Yeah, I guess . . . maybe they kind of looked at together in their concepts of consciousness, (inaudible). I met Morton Prince just once, at a Psychological Association meeting in 1920. I was sitting next to Robert Yerkes,³⁸ who said that they should not let Morton print. It might have to do with Yerkes having been on the faculty at Harvard. He had a little more down to earth approach to things. But I guess that *Dissociation of Personality* book . . . Miss B e a u c h a m p. He always called her “Bécham”³⁹ (laughs)

Cardeña: Beauchamp? (pronounces the name in French)

Hilgard: (assents and laughs)

Cardeña: (laughs) Maybe that is why you never use your Ropiequet name?

Hilgard: (laughs)

END OF INTERVIEW

References

- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (Rev. 3rd ed.). Washington DC: Author.
- Barber, T. X. (1999). A comprehensive three-dimensional theory of hypnosis. In I. Kirsch, A. Capafons, E. Cardeña-Buelna, and S. Amigó (Eds.), *Clinical hypnosis and self-regulation: Cognitive-behavioral perspectives* (pp. 21–48). Washington DC: American Psychological Association. doi:10.1037/10282-000
- Barnier, A. J., Dienes, Z., & Mitchell, C. J. (2008). How hypnosis happens: New cognitive theories of hypnotic responding. In M. R. Nash, and A. J. Barnier (Eds.), *The Oxford handbook of hypnosis: Theory, research, and practice* (pp. 141–177). Oxford, UK: Oxford University Press. doi:10.1093/oxfordhb/9780198570097.013.0006
- Belo, J. (1960). *Trance in Bali*. New York, NY: Columbia University Press.
- Benedict, R. (1946). *The chrysanthemum and the sword*. Boston, MA: Houghton Mifflin.
- Bowers, K. S. (1994). A review of Ernest R. Hilgard’s books on hypnosis, in commemoration of his 90th birthday. *Psychological Science*, 5(4), 186–189. doi:10.1111/j.1467-9280.1994.tb00497.x
- Brown, R. J., & Oakley, D. A. (2004). An integrative cognitive theory of hypnosis and high hypnotizability. In G. A. Jamieson (Ed.), *Hypnosis and conscious states: The cognitive neuroscience perspective* (pp. 152–186). Oxford, UK: Oxford University Press.
- Cardeña, E. (1994). The domain of dissociation. In S. J. Lynn & J. W. Rhue (Eds.) *Dissociation: Clinical and theoretical perspectives* (pp 15–31). New York, NY: Guilford.
- Cardeña, E. (2005). The phenomenology of deep hypnosis: Quiescent and physically active. *International Journal of Clinical & Experimental Hypnosis*, 53(1), 37–59. doi:10.1080/00207140490914234
- Cardeña, E., Lewis-Fernández, R., Bear, D., Pakianathan, I., & Spiegel, D. (1996). Dissociative disorders. In T. A. Widiger, A. J. Frances, H. J. Pincus, R. Ross, M. B. First, and W. W. Davis (Eds.), *Sourcebook for the DSM-IV. Vol. II* (pp. 973–1005). Washington DC: American Psychiatric Press.

³⁷Boris Sidis (1867–1923), founder with Prince of abnormal psychology in the U. S.

³⁸Morton Prince (1854.1929), physician who helped establish abnormal psychology as an academic discipline and wrote profusely on dissociation, including a book-length case study of a case of “multiple personality,” Ms. Beauchamp (Prince, 1905).

³⁹See also Hilgard (1986, p. 6). Rosenzweig (1987) describes the traumatic early life of Prince’s patient, whose actual name was Clara Fowler.

- Cardeña, E., & Spiegel, D. (1991). Suggestibility, absorption, and dissociation: An integrative model of hypnosis. In J. F. Schumaker (Ed.), *Human suggestibility: Advances in theory, research and application* (pp. 93–107). New York, NY: Routledge.
- Claparède, E. (1995). Recognition and selfhood. *Consciousness and Cognition*, 4(4), 371–378. Original work published 1911. doi:10.1006/ccog.1995.1044.
- Crawford, H. J. (2002). Ernest R. “Jack” Hilgard, 1904–2001. *Contemporary Hypnosis*, 19(1), 1–7. doi:10.1002/ch.234
- Erderlyi, M. H. (1985). *Psychoanalysis: Freud’s cognitive psychology*. New York, NY: Freeman.
- Franz, S. I. (1933). *Persons one and three: A study in multiple personalities*. New York, NY: McGraw Hill.
- Gauld, A. (1992). *A history of hypnotism*. Cambridge, UK: University of Cambridge Press.
- Gazzaniga, M. S. (2014). The split-brain: Rooting consciousness in biology. *PNAS*, 111(51), 18093–18094. doi:10.1073/pnas.1417892111
- Haggblom, S. J., Warnick, R., Warnick, J. E., Jones, V. K., Yarbrough, G. L., Russell, T. M., . . . Monte, E. (2002). The 100 most eminent psychologists of the 20th century. *Review of General Psychology*, 6(2), 139–152. doi:10.1037/1089-2680.6.2.139
- Hilgard, E. R., & Bower, G. H. (1975). *Theories of learning* (4th ed.). New York, NY: Prentice Hall.
- Hilgard, E. R., & Hilgard, J. R. (1983). *Hypnosis in the relief of pain* (Rev. ed.). Los Alto, CA: William Kaufmann.
- Hilgard, E. R. (1963). *Manual for Stanford profile scales of hypnotic susceptibility*. Palo Alto, CA: Consulting Psychologists Press.
- Hilgard, E. R. (1965). *Hypnotic susceptibility*. New York, NY: Harcourt Brace Jovanovich.
- Hilgard, E. R. (1980). The trilogy of mind: Cognition, affection, and conation. *Journal of the History of the Behavioral Sciences*, 16(2), 107–117. doi:10.1002/1520-6696(198004)16:2<107::aid-jhbs2300160202>3.0.co;2-y
- Hilgard, E. R. (1986). *Divided consciousness: Multiple controls in human thought and action* (Expanded ed.). New York, NY: Wiley-Interscience.
- Hilgard, E. R. (1987). *Psychology in America: A historical survey*. New York, NY: Harcourt Brace Jovanovich.
- Hilgard, E. R. (1994). Neodissociation theory. In S. J. Lynn, and J. W. Rhue (Eds.), *Dissociation: Clinical and theoretical perspectives* (pp. 32–51). New York, NY: Guilford.
- Hilgard, J. R., & Hilgard, E. R. (1962). Developmental-interactive aspects of hypnosis: Some illustrative cases. *Genetic Psychology Monographs*, 66(1), 143–178.
- Hilgard, J. R. (1979). *Personality and hypnosis: A study of imaginative involvement*. Chicago, IL: University of Chicago Press.
- Hull, C. L. (1933). *Hypnosis and suggestibility: An experimental approach*. New York, NY: D. Appleton-Century.
- James, W. (1890). *The principles of psychology*. New York, NY: Henry Holt.
- Kihlstrom, J. F. (1998). Dissociations and dissociation theory in hypnosis: Comment on Kirsch and Lynn (1998). *Psychological Bulletin*, 123(2), 186–191. doi:10.1037/0033-2909.123.2.186
- Kihlstrom, J. F. (2002). In memoriam: Ernest Ropiequet Hilgard, 1904–2001. *International Journal of Clinical and Experimental Hypnosis*, 50(2), 95–103. doi:10.1080/00207140208410093
- Laurence, J.-R., & Perry, C. (1981). The “hidden observer” phenomenon in hypnosis: Some additional findings. *Journal of Abnormal Psychology*, 90(4), 334–344. doi:10.1037/0021-843X.90.4.334
- Leary, D. E. (n.d.). Hilgard, Ernest Ropiequet. Retrieved from <https://www.encyclopedia.com/science/dictionaries-thesauruses-pictures-and-press-releases/hilgard-ernest-ropiequet>.
- Mead, M., & Bateson, G. (1951). *Trance and dance in Bali*. Film <https://www.loc.gov/item/mbrs02425201/>
- Miller, G. A., Galanter, E., & Pribram, K. H. (1960). *Plans and the structure of behavior*. New York, NY: Henry Holt.
- Miller, M. E., & Bowers, K. S. (1993). Hypnotic analgesia: Dissociated experience or dissociated control? *Journal of Abnormal Psychology*, 102(1), 29–38. doi:10.1037/0021-843x.102.1.29
- Myers, F. W. H. (1903). *Human personality and its survival of bodily death*. London, UK: Longmans, Green.

- Nemiah, J. C. (1989). Janet redivivus: The centenary of *L'automatisme psychologique*. *American Journal of Psychiatry*, 146(12), 1527–1529. doi:10.1176/ajp.146.12.1527
- Otani, A. (2016). Hypnosis and mindfulness: The twain finally meet. *American Journal of Clinical Hypnosis*, 58(4), 383–398. doi:10.1080/00029157.2015.1085364
- Pekala, R. J. (1991). Hypnotic types: Evidence from a cluster analysis of phenomenal experience. *Contemporary Hypnosis*, 8(2), 95–104.
- Piccione, C., Hilgard, E. R., & Zimbardo, P. G. (1989). On the degree of stability of measured hypnotizability over a 25-year period. *Journal of Personality and Social Psychology*, 56(2), 289–295. doi:10.1037//0022-3514.56.2.289
- Prince, M. (1905). *The dissociation of a personality*. London, UK: Longmans, Green & Co.
- Radulovic, J., Lee, R., & Ortony, A. (2018). State-dependent memory: Neurobiological advances and prospects for translation to dissociative amnesia. *Frontiers of Human Neuroscience*, 12(259). doi:10.3389/fnhbeh.2018.00259
- Rosenzweig, S. (1987). Sally Beauchamp's career: A psychoarchaeological key to Morton Prince's classic case of multiple personality. *Genetic, Social, and General Psychology Monographs*, 113(1), 5–60.
- Schneider, W., & Shiffrin, R. M. (1977). Controlled and automatic human information processing: I. Detection, search, and attention. *Psychological Review*, 84(1), 1–66. doi:10.1037/0033-295X.84.1.1
- Spiegel, D., & Cardeña, E. (1991). Disintegrated experience: The dissociative disorders revisited. *Journal of Abnormal Psychology*, 100(3), 366–378. doi:10.1037//0021-843x.100.3.366
- Spiegel, H. (1977). The hypnotic induction profile (HIP): A review of its development. *Annals of the New York Academy of Sciences*, 296(1), 129–142. doi:10.1111/j.17496632.1977.tb38167.x
- Terhune, D. B., Cardeña, E., & Lindgren, M. (2011). Dissociative tendencies and individual differences in high hypnotic suggestibility. *Cognitive Neuropsychiatry*, 16(2), 113–135. doi:10.1080/13546805.2010.503048
- Terhune, D. B., & Cardeña, E. (2010). Differential patterns of spontaneous experiential response to a hypnotic induction: A latent profile analysis. *Consciousness and Cognition*, 19(4), 1140–1150. doi:10.1016/j.concog.2010.03.006
- Tulving, E. (1985). How many memory systems are there? *American Psychologist*, 40(4), 385–398. doi:10.1037/0003-066X.40.4.385
- Van Nuys, D. (1973). Meditation, attention, and hypnotic susceptibility: A correlational study. *International Journal of Clinical and Experimental Hypnosis*, 21(2), 59–69. doi:10.1080/00207147308409306
- Weitzenhoffer, A. M., & Hilgard, E. R. (1962). *Stanford hypnotic susceptibility scale, form C*. Palo Alto, CA: Consulting Psychologists Press.
- Weitzenhoffer, A. M. (1980). Hypnotic susceptibility revisited. *American Journal of Clinical Hypnosis*, 22(3), 130–146. doi:10.1080/00029157.1980.10403217
- Winkelman, M. (1992). *Shamans, priests and witches. A cross-cultural study of magico-religious practitioners* (Anthropological Research Papers No. 44). Arizona State University. Doi: 10.1177/136346159503200105
- Woody, E. Z., & Bowers, K. S. (1994). A frontal assault on dissociated control. In S. J. Lynn & J. W. Rhue (Eds.), *Dissociation: Clinical and theoretical perspectives* (pp. 52–79). New York, NY: Guilford.