

“Cosmic Pancakes” Interview with John F. Kihlstrom

Note: In early 2023, I did an interview with Kevin and Amy Sheldrake, whose ["Cosmic Pancakes" blog](#) is devoted to all things hypnotic (Kevin was at the time a graduate student at the University of Sussex, working with Zoltan Dienes, who has a large laboratory devoted to hypnosis and related topics). The interview was conducted via email, which gave me the opportunity to annotate my responses with reference citations. The interview, with illustrations selected by the Sheldrakes is posted in three parts: [Part 1](#) here, [Part 2](#) here, and [Part 3](#) here. What follows is the full text, without illustrations.

For the record, in 2002, I did an interview with Eric Vermetten on a somewhat different set of hypnosis-related topics (*International Society of Hypnosis Newsletter*, **26**(1), 22-40).

What caused you to enter this field and study hypnosis?

I got into hypnosis entirely by accident. I had long intended to be a psychologist, but my interests centered on personality (Kihlstrom, 2017). At Colgate University, where I did my undergraduate degree, the Psychology major was relatively small, so each major was apprenticed to one of the faculty members. I chose Bill Edmonston, because he taught the Personality course; it was only later that I discovered that he did hypnosis research.

Edmonston had been recruited to Colgate by George Estabrooks, a pioneer in hypnosis (he made the first recorded hypnotic induction). Edmonston had been a student of Frank Pattie, a distinguished early hypnosis researcher, at Kentucky (Edmonston, 2000). Pattie had been a Master's student at Harvard when P.C. Young and others were doing the first controlled experiments on hypnosis -- if you ignore the Franklin Commission, which didn't know that's what it was doing (Kihlstrom, 2002b); he

had co-founded the Hypnosis Seminars with Milton Erickson; and was probably the world's foremost expert on Franz Anton Mesmer (his collection of Mesmer materials is now in the Princeton University library). And Edmonston had done postdoctoral work with John Stern, a prominent psychophysicologist, at Washington University in St. Louis, who later reported an amazing, Spartan study of hypnotic analgesia (Stern, Brown, Ulett, & Sletten, 1977). As well, he was serving as Editor of the *American Journal of Clinical Hypnosis*, succeeding the Founding Editor, Milton Erickson (Kihlstrom & Frischholz, 2010). Anyway, I assisted in Edmonston's research on psychophysiological aspects of hypnosis, mostly running screening sessions with the Harvard Group Scale, and did my senior honors project on the subject as well (Kihlstrom & Edmonston, 1971).

By then, Charles Tart had published his groundbreaking anthology on *Altered States of Consciousness* (Wiley, 1969), which had a section on hypnosis and reprinted Ron Shor's early theoretical papers on hypnosis and the "generalized reality orientation". It was the sixties: those two papers struck a responsive chord in me, and I decided that I wanted to do my graduate work someplace where I could continue to study hypnosis. I didn't apply to Stanford, though I got to work with Jack Hilgard later, when I was on sabbatical from Harvard (Hilgard, Crawford, Bowers, & Kihlstrom, 1979). I did get into Penn's Program of Research Training in Personality and Experimental Psychopathology, a forerunner of today's "Clinical Science" programs. Martin Orne had a big laboratory, called the Unit for Experimental Psychiatry, and he took me on as a graduate student (Kihlstrom, 2001b; Kihlstrom & Frankel, 2000). By that time, Shor had left Orne's lab to take a faculty position at New Hampshire; I got to collaborate with him, too, later, when I was at Harvard. Anyway, for five years I worked closely with Orne, his

wife Emily (Dinges, Kihlstrom, & McConkey, 2017), and Fred Evans (Kihlstrom, 2006), an Australian who had done his graduate work with Gordon Hammer and J.P. Sutcliffe at Sydney. I didn't have a clear idea of what particular aspect of hypnosis I wanted to work on, but Fred put me onto posthypnotic amnesia. From there, it was a process of deepening and broadening my interests in hypnosis and related topics, like memory.

What did you think hypnosis was and how it might work when you entered the field? e.g., state, dissociation, social construct, role play, etc.

I didn't have clear ideas about the nature of hypnosis at the start. Edmonston subscribed to the Pavlovian view that "neutral" hypnosis was essentially a form of deep relaxation, which is how his psychophysiological work was oriented (Edmonston, 1977, 1981, 1991). I had my own flirtation with psychophysiology: after I read some papers reprinted in Tart's anthology which suggested that there were EEG differences between Zen and Yoga meditation, I tried to get a prominent Zen master to let me record his EEG during meditation. The project failed, and that's a good story, but I digress.

Anyway, Shor's papers suggested that there was also an alteration in consciousness involved (he had been a student of Abraham Maslow, and his ideas about hypnosis and what we now call "absorption" were related to Maslow's notion of "peak experiences"). My senior thesis tried to explore changes in consciousness in neutral hypnosis, but I also had the idea that the real changes in consciousness came about through specific suggestions for analgesia, amnesia, and the like.

Martin's approach to hypnosis was, essentially, atheoretical – or, more accurately, catholic. He had questions about hypnosis – whether subjects really became more childlike in age regression (Orne, 1951), whether it could coerce

antisocial behavior (Orne & Evans, 1965; Evans was the confederate who had the nitric acid thrown at him), whether it could improve muscle strength (F.J. Evans & Orne, 1965); what happens if the hypnotist disappears while the subject is hypnotized (F.J. Evans & Orne, 1971; Orne & Evans, 1966); how long posthypnotic suggestions last (Damaser, Whitehouse, Orne, Orne, & Dinges, 2010) – things like that. Along the way, he developed his notions about the social psychology of the psychological experiment – ecological validity, demand characteristics, and the like, which interested him independent of any connection to hypnosis (Orne, 1962, 1970, 1972, 1973) (see also Kihlstrom, 2002a; Kihlstrom, 2020a). But unlike Ron Shor, Orne never really proposed a theory of his own. He had the idea that “trance logic” was an important element of hypnosis, and that implies an alteration of consciousness, but he didn’t usually talk about hypnosis in those terms. As a psychiatrist, he understood the historical connection between hypnosis and hysteria – what we now call the dissociative and conversion disorders. But his PhD was in social psychology, under Robert W. White (whose own theory combined both altered-state and motivational constructs; White, 1941), and he had a keen appreciation for the social dynamics of the hypnotic situation – and, for that matter, the dissociative and conversion disorders as well.

My own work has followed Martin’s example. I identify myself as a cognitive social psychologist with clinical training and interests. Much as Martin would, I think, I define hypnosis as an alteration in consciousness that takes place in a particular interpersonal context (Kihlstrom, 2008b). So while I’m primarily interested in the cognitive side, I recognize that hypnosis is a complicated phenomenon which needs to

be understood from the point of view of both cognitive and social psychology (Kihlstrom, 1978, 1985a, 1997b, 2003, 2008b).

To tell the truth, I am more interested in exploring specific hypnotic phenomena than in theorizing about hypnosis. My research set out the basic parameters of posthypnotic amnesia; and I found out some things about its underlying mechanisms that we didn't know, or appreciate, before (summarized in Kihlstrom, 2020b). My lab has also explored other phenomena, such as posthypnotic suggestion (Tobis & Kihlstrom, 2010) and tactile anesthesia (Tataryn & Kihlstrom, 2017). We've done studies of individual differences in hypnotizability and their personality and cognitive correlates (Glisky & Kihlstrom, 1993; Nadon, Kihlstrom, Hoyt, & Register, 1991), including a clarification of the relationship of hypnotizability to the "openness" factor of the "Big Five" structure of personality (Glisky & Kihlstrom, 1993), and what I believe was the first neuropsychological study of hypnotizability, testing the "right hemisphere" hypothesis of hypnosis (Kihlstrom, Glisky, McGovern, Rapcsak, & Mennemeier, 2013).

But I never saw an academic job posting for a "Professor of Hypnosis", and even Stanford didn't offer a specialization in hypnosis, along with cognitive and social and developmental psychology. So from the beginning I have assiduously tried to connect hypnosis to topics that other people were interested in. And studying hypnosis has connected *me* to other topics, as well. Hypnosis led me to broaden my interests – to memory in general (Kihlstrom, 2009, 2020c; Kihlstrom, Dorfman, & Park, 2017; Park, Shobe, & Kihlstrom, 2005); to the dissociative and conversion disorders that used to be labeled "hysteria" (Kihlstrom, 1994a, 2005), to the nature of unconscious mental life (Kihlstrom, 1987a, 1994b, 2012, 2019; Kihlstrom, Mulvaney, Tobias, & Tobis, 2000),

and more recently to the nature of consciousness in general (Kihlstrom, 1984, 1997a, 2021c, 2022a, 2022b, 2023). In some ways, hypnosis exemplifies the person-situation interaction, and I've written about that as well (Kihlstrom, 2013b).

Here's an example of how things played out in my research career. A correlational study of hypnotizability and imagery ability (Glisky, Tataryn, & Kihlstrom, 1995) led to a psychometric study of individual differences in imagery ability outside the hypnotic context (Kihlstrom, Glisky, Peterson, & Harvey, 1991); which led to an experimental study of whether mental images, like percepts, are reversible (they are; Peterson, Kihlstrom, Rose, & Glisky, 1992); which led to the documentation of the Arizona Whale-Kangaroo, the first new reversible figure in half a century, and an experimental study of differences between Americans and Australians in perception of the figure (Kihlstrom et al., 2018).

Another example: Posthypnotic amnesia is a disorder of memory retrieval. Because the prevailing two-process theory of memory retrieval implicates organized search as critical to successful recall, much of my research focused on organizational processes (e.g., F.J. Evans & Kihlstrom, 1973; Kihlstrom & Wilson, 1984; Wilson & Kihlstrom, 1986). Two-process theories also hold that recognition should be superior to recall, because the former obviates the initial search process – and that's true for posthypnotic amnesia as well. By the way, simulators remain "amnesic" even with recognition testing (Barber & Calverley, 1966; Spanos, James, & De Groot, 1990; Williamsen, Johnson, & Eriksen, 1965). The demand characteristics are clear: hypnotic subjects aren't supposed to remember anything, anyhow.

But there is a two-process theory of recognition as well, and it appears that successful recognition in posthypnotic amnesia is largely mediated by a priming-based feeling of familiarity, rather than by conscious recollection (Kihlstrom, 2021b). Moving beyond hypnosis, we found that familiarity also mediated recognition in ECT-induced amnesia (Dorfman, Kihlstrom, Cork, & Misiaszek, 1995); and moving beyond amnesia, we found a similar familiarity-based process in stimulus detection during hypnotic tactile anesthesia (Tataryn & Kihlstrom, 2017); moving beyond hypnosis, we showed that the bipartite distinction between recollection and familiarity is incomplete, and that at least a third variant of recollective experience, *knowing*, must be added to the list (Kihlstrom, 2020c). There might even be a fourth variant, *believing*, which would be relevant to things like false memory syndrome; but I wasn't able to nail that down before I closed my lab.

How do you currently understand hypnosis and how do you think it works?

If you held a gun to my head, I'd confess that I'm a "state theorist", because it's clear to me that amnesia, analgesia, and the other classic phenomena of hypnosis entail alterations in consciousness -- what else would you call them, unless you believe that subjects are simply faking the whole thing (Kihlstrom, 2018)? Hypnotized individuals -- and here I'm talking about highly hypnotizable individuals -- see and hear things that aren't there; they don't feel touch or pain; they experience themselves as four years old again, or a different gender; they carry out actions without knowing why; and they don't remember what they did while they were hypnotized. That doesn't mean that sociocultural factors play no role: they do. And that doesn't mean that any of these

phenomena are unique to hypnosis: they probably aren't. But, given a hypnotizable subject, hypnosis seems to be the most reliable way to produce them on demand. But rather than get deeply into the debate over the nature of hypnosis, I've preferred to focus on the nature of specific hypnotic phenomena – much the way that Jack Hilgard did with hypnotic analgesia – and, for that matter, individual differences in hypnotizability.

A lot of my work looked at posthypnotic amnesia, drawing on principles and methods from the study of normal human memory (Kihlstrom, 1985b, 1997c, 2020b). My first paper, with Fred Evans, looked at the temporal sequencing of recall during partial posthypnotic amnesia (F.J. Evans & Kihlstrom, 1973). Because posthypnotic amnesia is reversible, it's obvious that the mechanism lies at the retrieval stage of memory processing, rather than encoding or storage. At the time, theories of memory retrieval focused on organization: recall succeeds because the process of retrieval follows the relations between target items. So when recall fails, perhaps that's because the retrieval process is disorganized. For a series of suggestions on the standardized hypnotizability scales, which is what we were working with, the most obvious mode of organization was temporal sequencing. And, indeed, Evans and I found that temporal sequencing was significantly disrupted in hypnotizable subjects who, despite a suggestion for complete amnesia, still were able to recall some items. Insusceptible subjects, by contrast, tended to recall the items they remembered in order, from first to last.

Then I took a step back, and did some basic descriptive studies of amnesia, not focusing so much on mechanisms. Evans and I documented the reversibility of

amnesia more carefully than had been done before (Kihlstrom & Evans, 1976); we showed that even after reversibility there remains a residual amnesia among hypnotizable subjects (Kihlstrom & Evans, 1977); and when subjects do remember some items, they do so generically – they say things like “I did something with my hands”, while insusceptible subjects say things like “I put my two hands out, and felt like there was a magnet drawing them together” (Kihlstrom & Evans, 1978). While amnesia does dissipate somewhat over time, it does not fully remit in the absence of the reversibility cue (Kihlstrom, Easton, & Shor, 1983). Also, the amnesia does not reverse merely with the reinduction of hypnosis, so it is not an instance of state-dependent learning (Kihlstrom, Brenneman, Pistole, & Shor, 1985). Recognition testing reduces amnesia, compared to the usual recall test, as might be expected, but it doesn’t abolish it (Kihlstrom & Shor, 1978); and subjects can experience amnesia even if they have been told about the scale items before they’ve been hypnotized (Shor, Pistole, Easton, & Kihlstrom, 1984). Finally, we established the standard for rescoring the amnesia suggestion on the Harvard Scale to include reversibility as well as initial amnesia (Kihlstrom & Register, 1984).

In addition to these descriptive, parametric studies, I continued to explore the mechanisms of amnesia. We confirmed the original finding of temporal disorganization (Kihlstrom & Evans, 1979), and showed that hypnotizable subjects had difficulty putting the items in order even when they were instructed to do so (Kihlstrom, Evans, Orne, & Orne, 1980). We also observed the temporal-disorganization effect in a more traditional verbal-learning paradigm, with word lists instead of scale items as the to-be-remembered material (Kihlstrom & Wilson, 1984); and we found that other forms of

organization, such as category clustering and subjective organization, were not as affected by amnesia (Kihlstrom & Wilson, 1988; Wilson & Kihlstrom, 1986). Moving beyond organization, I found that priming was preserved in posthypnotic amnesia – one of the earliest demonstrations of the dissociation between explicit and implicit memory (Kihlstrom, 1980) – a finding that others subsequently confirmed and extended (Barnier, Bryant, & Briscoe, 2001; David, Brown, Pojoga, & David, 2000). Most recently, I showed that successful recognition during posthypnotic amnesia is mediated by a priming-based feeling of familiarity (Kihlstrom, 2021b).

I wasn't intrinsically interested in memory when that first study started; I had never had a course on memory, but then I really got into it, and over the years I've published a lot of research on various aspects of implicit memory outside of hypnosis. At Arizona, Dan Schacter and I ran a joint lab called the Amnesia and Cognition Unit, and we were the first to provide convincing evidence of spared priming for material presented during general anesthesia (Kihlstrom, Schacter, Cork, Hurt, & Behr, 1990). Another study found that sleep doesn't seem to spare implicit memory (Wood, Bootzin, Kihlstrom, & Schacter, 1992) – though there were enough differences between the two experiments that this question is still open. We also did a little study of autobiographical memory in a case of multiple personality disorder (Schacter, Kihlstrom, Kihlstrom, & Berren, 1989). As with posthypnotic amnesia, Jenifer Dorfman and I showed that spared implicit memory provided a familiarity-based basis for successful recognition in the retrograde amnesia associated with ECT (Dorfman et al., 1995). A collaboration with Stan Klein, a former graduate student now at UC Santa Barbara, found that traumatic retrograde amnesia affected episodic, but not semantic, memories concerning

the self (Klein & Kihlstrom, 1998; Klein, Loftus, & Kihlstrom, 1996). We think that this was the first neuropsychological study of social cognition. And all of this really began with that one study of priming in posthypnotic amnesia: they are more examples of connecting hypnosis up to other things.

You seem to suggest that hypnosis is either an alteration in consciousness, or a sham (is that fair?). I appreciate you are more interested in the phenomena of hypnosis, rather than the nature of it, but I was wondering what you thought of hypnotic suggestions being given in a hypnotic context, but without an induction and seemingly without the participant entering a hypnotic state? Do you think waking suggestions are different to hypnotic suggestions, for example?

The only thing that makes hypnosis interesting is altered subjective experience. If subjects really don't forget what they've been doing while they were hypnotized, if they really do feel the pain after all, I don't see why anyone would be interested in it. And if subjective experience is genuinely altered, then it seems to me obvious that hypnosis, or at least the phenomena that constitute the domain of hypnosis, entails alterations in consciousness – in the phenomenal experience of seeing, or hearing, or remembering; in the experience of voluntariness or involuntariness. J.P. Sutcliffe argued that hypnosis was in some sense a delusion because the experience of the subject departed from “the actual stimulus state of affairs”. That's an alteration in consciousness.

But your question is whether a hypnotic induction is necessary to achieve these effects. I don't know exactly what it means to give hypnotic suggestions in a hypnotic context but without inducing a hypnotic state, since a hypnotic induction would seem to

be a necessary part of establishing a hypnotic context, but I get the idea. Martin Orne loved to tell a story about George Estabrooks, who back in the 1920s first recorded a hypnotic induction in order to standardize his experimental procedures. One day, as the story went, a subject arrived; Estabrooks put on the record, left the room, and returned a few minutes later to find the subject deeply hypnotized. It was only later that Estabrooks discovered that he had accidentally put on a recording of a Swiss yodeler! What Esty was doing with a recording of a Swiss yodeler is another question, but apparently the subject was hypnotizable, maybe already an experienced hypnotic subject; he came to Estabrooks's lab prepared to be hypnotized, and that was that. And we know that hypnosis can be induced by means of a posthypnotic suggestion – again provided that the subject is hypnotizable – without going through the whole 15-minute induction procedure of the Harvard Group Scale.

So it's legitimate to ask whether a formal hypnotic induction does anything, and if so, how it does it. This isn't a question I've felt compelled to ask because I'm not that interested in hypnosis *per se*. I've been interested in looking at specific hypnotic phenomena, like amnesia, and that's an entirely different thing. And one thing we know is that posthypnotic amnesia has properties that differentiate it from similar phenomena observed in what, for shorthand, we can call the "normal waking state". Take, for instance, instructed forgetting, in which subjects are presented with a list of words, and instructed to forget some of them. Instructed forgetting comes in a variety of forms, but post-input cuing of item sets -- the one that most closely resembles posthypnotic amnesia -- isn't very effective at all (Basden, Basden, Coe, Decker, & Crutcher, 1994; David et al., 2000; Kihlstrom, 1983; Kihlstrom & Barnhardt, 1993). Same goes for

thought suppression – as in Dan Wegner’s “White Bear” study (Wegner, Schneider, Carter, & White, 1987): thought-suppression produces an ironic rebound, but posthypnotic amnesia does not (Bowers & Woody, 1996). Posthypnotic amnesia is correlated with hypnotizability, but this isn’t the case for either directed forgetting or thought suppression. All of these effects involve retrieval inhibition, instigated by verbal instructions or suggestions, but otherwise they are very different. It’s just not the case that posthypnotic amnesia is just a souped-up version of nonhypnotic thought suppression.

Stepping away from posthypnotic amnesia, the “induction question” can be addressed straightforwardly by simply omitting a formal induction procedure. This approach goes back at least to the time of Hull (1933), who reported four studies in which the target was a simple ideomotor suggestion, such as postural sway. Over all four studies, comparing induction to no induction, Hull reported that hypnosis reduced response time by 38%. Hull thought that traditional authorities would have been disappointed by such a result, and maybe he was, too. Still, he published the raw data from all those studies, and when you run a paired-sample t test, you get a pretty big effect size: Cohen’s $d = .80$, to be exact (I know this because I did the calculations recently in the course of reviewing a paper on this topic). Most psychologists would kill for an effect that large.

Now Hull tested his hypothesis with only a single ideomotor suggestion, of the type included, before induction, on SHSS:A/B and HGSHS:A. We might get a bigger effect if we tested a wider range of suggestions. That’s exactly what Weitzenhoffer & Sjöberg (1961) did, employing a 17-item scale spanning a wide variety of hypnotic

suggestions – ideomotor (passive and challenge) and perceptual-cognitive, presumably administered in the course of developing SHSS:A and SHSS:C. They also published their raw data. The correlation between hypnotic and nonhypnotic suggestibility was high, $r=.79$; but the effect of hypnotic induction was also strong, $d=.80$. So the fact that hypnotizability and waking suggestibility are highly correlated doesn't preclude there also being an effect of hypnotic induction. Hilgard and Tart (Hilgard & Tart, 1966) found much the same thing comparing hypnosis with an imagination condition: depending on whether you do a within-subjects or a between-groups analysis, the effect sizes are pretty respectable ($d = .64$ and $.42$, respectively).

Now, you can say: "Wait! That's not fair! You can't just give people suggestions cold. You've got to establish the proper attitudes, motivations, and expectancies; you've got to encourage subjects to really have the suggested effects!". I guess that's what's meant by "setting the hypnotic context", but the problem is that you can lay the beliefs, expectations, and encouragement on so thick that you risk getting behavioral compliance in the absence of the subjectively compelling experiences that make hypnosis interesting. That's a problem that Ted Barber confronted (Bowers, 1967; Bowers & Gilmore, 1969), and to some extent Nick Spanos as well (Bates, 1992; Bates, Miller, Cross, & Brigham, 1988).

Anyway, the equation of hypnotizability with suggestibility – the idea that hypnotizability is just suggestibility tested in a hypnotic context -- is too facile, not least because there are many different kinds of suggestibility, and hypnosis isn't related to all of them. There's the primary and secondary suggestibility of Eysenck and Furneaux (1945); the tertiary suggestibility proposed by Evans (1967), otherwise known as

ordinary social compliance; the placebo effect; Gudjonsson's (1984) interrogative suggestibility; and probably more. There's a research program here, assessing the relationships among these various kinds of suggestibility, and their correlation with hypnotizability. And it would be worth pursuing. People talk about doing this, but it's a little like the weather: nobody ever does anything about it.

Even if you could show that a hypnotic induction is unnecessary, there would still be some mysteries. Consider, for example, the discovery by Amir Raz that hypnotic suggestions for alexia (or maybe agnosia, it's not completely clear) can abolish the Stroop color-word effect (Raz, Shapiro, Fan, & Posner, 2002). That's exciting for a number of reasons. First, a number of investigators have tried to abolish Stroop interference by inducing color blindness, and it just doesn't work. Raz's approach was directed at reading, not color perception. But the implications go beyond hypnosis, because the Stroop effect is generally regarded as a result of automatic processing: skilled readers can't help but read the words, and reading the words interferes with color naming. There's been an unspoken (and untested) assumption that once a process has been automatized, it stays automatized forever. Once you learn to read, you can't unlearn it (except, perhaps, through acquired alexia, but that's a matter of brain damage, not unlearning). Raz's findings seem to indicate that a process, once automatized, can be *de*-automatized; that a bell, once rung, can be unrung after all (Kihlstrom, 2011). Arthur Deikman (1966) raised the possibility of de-automatization through meditation, in another paper I first encountered in Tart's anthology, long before automaticity had a technical definition in cognitive psychology. And for her dissertation at Yale, Heidi Wenk-Sormaz (2006) showed that a 15-minute breathing meditation

does, indeed, lead to de-automatization. So, if hypnotic suggestion can lead to de-automatization, it's not unique in this respect. This is a matter of great potential theoretical importance, in light of which it doesn't matter whether hypnosis has been induced or not.

Now, Raz did a later experiment with Irving Kirsch, who has been among the most prominent in arguing that hypnotizability is just another name for suggestibility (at least that's how I interpret him), and they showed that the induction of hypnosis isn't necessary to get Raz's effect (Raz, Kirsch, Pollard, & Nitkin-Kaner, 2006). You can get it without inducing hypnosis – provided that the subjects are hypnotizable (minor detail, but never mind!). That's important if you think that hypnosis has some special power. But it's completely irrelevant to the larger, much more important, much more interesting, theoretical point: which is that de-automatization is possible. The point is: if you're a cognitive psychologist, all that matters is that an automatic process can be de-automatized. It doesn't matter whether you've used hypnosis or not. Still, for now anyway, it seems that hypnotizing hypnotizable subjects is the most reliable way to get hypnotic phenomena. And I dare say that Amir would never have tried his experiment if he hadn't thought that hypnosis was critical to its success.

Here's another example: the use of hypnotic suggestion to induce psychosomatic effects. The classic instance, which was rediscovered by Ken Bowers (Bowers & Kelly, 1979), was Mason's (1952) treatment of a case of ichthyosiform erythrodermia (so-called "fish-skin disease"). Here is a congenital skin disease, completely resistant to treatment; Mason tried hypnosis as an act of desperation, and it worked; and we know that the remission resulted from suggestion because of the careful manner in which

Mason documented the case. There are many controlled, experimental studies of this sort, mostly involving allergies, asthma, and the like. There's a striking study by Ikemi and Nakagawa (1962) in which hypnotic suggestion modulated a contact dermatitis similar to poison ivy. Even Nick Spanos, famous as a skeptic about hypnosis, got positive results with hypnotically suggested remission of warts (Spanos, Stenstrom, & Johnson, 1988; Spanos, Williams, & Gwynn, 1990).

I reviewed a lot of this literature in an address to the SCEH some years ago (Kihlstrom, 2013a), and in a couple of papers (Kihlstrom, 2002c, 2008c, 2023). These studies are interesting because they speak to a neglected aspect of the mind-body problem. Modern cognitive science has been consumed by the mind-body problem, but it hasn't adequately recognized that the relation between mind and body is bidirectional: brain states cause mental states, but mental states can have physical effects outside the nervous system. Hypnosis underscores this reciprocal relationship.

I said before that Bill Edmonston was something of a Pavlovian when it came to hypnosis, and I was always struck by the title of a book he had on his office shelves, by another Pavlovian: *The Word as a Physiological and Therapeutic Factor*, by K.I. Platonov (1959), a Ukrainian psychologist from back in Soviet times. The suggestion, the idea, that you're touching a poisonous leaf gives you a skin rash; the suggestion, the belief, that your warts will disappear makes them go away. Just words. Not all the time, and not for everyone, but often enough to be interesting. I suspect that the most reliable way to get these effects is to make hypnotic suggestions to hypnotizable subjects who have been hypnotized. But it doesn't matter if it turns out that a hypnotic induction isn't necessary to produce these effects; that ordinary suggestion -- just words

-- will work as well. In the larger scheme of things, what matters is that hypnosis draws attention to the fact that ideas and beliefs can have bodily consequences, and that psychosomatic effects are real and worth studying.

Earlier you talked about the Stroop effect. Are you aware of the recent experiment by Palfi et al. (*Cortex*, 2021), out of our lab, about suggested alexia? They tested hypnotically suggested word blindness against imagined word blindness and a ‘try your best’ condition in counter-balanced order. There was no difference between the suggested and imagined conditions, save for that the suggested condition felt involuntary vs the imagined condition feeling voluntary; and both were significantly different to the control condition. It appears to imply that de-automatization can be done with the imagination alone!

That paper is one of several studies following up on the very interesting research of Amir Raz, in which hypnotic suggestions for alexia (word-blindness) reduced the Stroop color-word interference effect. It’s a very dense paper, with a lot going on in it, and I don’t want to delve into it too deeply. Yes, they found equivalent reductions in Stroop interference in both the “suggestion” and “imagination” conditions. But Palfi et al. employed only “high-suggestible” subjects in their experiment, leaving open the question of how low-suggestible subjects would perform. Based on the Raz-Kirsch experiment, we would expect them not to perform very well in either condition. So, apparently, you can get alexia regardless of whether subjects are hypnotized – provided that they’re hypnotizable. This is not a problem for me.

Palfi et al. did find one big difference between their hypnosis and imagination conditions, which is that subjects in the hypnosis condition showed greater experienced involuntariness in responding. Of course, this may simply have reflected differences in the instructions between the two conditions. In the hypnosis condition, the subjects

were told that “meaningless symbols” would appear on the screen, whereas in the imagination condition they were instructed to actively imagine the presented words as gibberish. Philosophers, notably R.S. Peters (1958/1960) and Ruth Macklin (1968), call this the distinction between a “happening” and a “doing”. Ted Sarbin (1984) and Nick Spanos (1986a) picked up on this distinction, in their arguments about experienced involuntariness in hypnosis: subjects’ reports of involuntariness are either in compliance with demand characteristics, or else they are attributions that they are encouraged to make about their own behavior. Spanos went even further, suggesting that reports of inability to resist hypnotic suggestions, something closely related to experienced involuntariness, was simply a strategy that subjects use to convince observers that they are really hypnotized (Spanos, Cobb, & Gorassini, 1985).

Now, Palfi doesn’t think that reports of involuntariness are merely a matter of demand characteristics and self-presentation, and neither do I. In order to explain experienced involuntariness, they rely on the “cold control” theory of hypnosis offered by Zoltan Dienes and Josef Perner (2007). To a cognitive social psychologist, the phrase “cold control” brings to mind the distinction between “cold cognition”, of the sort that cognitive psychologists typically study, and the “hot cognition”, laced with emotion and motivation, that social psychologists favor, but that’s not what they have in mind (Abelson, 1963). Instead, Dienes and Perner draw on the “Higher Order Thought” (HOT) theory of consciousness proposed by David Rosenthal (2005). For Rosenthal, consciousness is tantamount to metacognition: we have first-order thoughts (FOTs), including mental representations of current, past, and future events, intentions for action, and so on, and then we have higher-order thoughts (HOTs) about those

thoughts – meta-thoughts, if you will – and these HOTs constitute consciousness. Without HOTs, FOTs are unconscious. The opposite of “hot“ is “cold”, so the “cold” in cold control theory is a clever play on words.

It’s an appealing idea. The late Tom Nelson (1996), a pioneer in the study of metamemory, also proposed a link between metacognition and consciousness, and Julian Jaynes (1976) had a similar idea about consciousness in his theory of the bicameral mind (Kihlstrom, 2021a). In a sense, cold control theory is a variant on dissociation theory, because FOTs and HOTs, which normally go together, can be dissociated from each other. I expressed a similar idea, in the context of Jack Hilgard’s (1977) neodissociation theory of divided consciousness, published in the inaugural issue of *Consciousness and Cognition* (Kihlstrom, 1992): a percept, memory, or thought might be processed by one cognitive subsystem (what the neuropsychologists might call a cognitive module), comprising a FOT; but not processed by the Executive Ego, which would ordinarily give rise to HOTs and conscious awareness. Bringing us closer to the Palfi experiment, a posthypnotic suggestion might be executed by such a subsystem, without the intention, or the action itself, ever reaching the Executive Ego. So while the difference in experienced involuntariness is consistent with cold control theory, it’s also consistent with neodissociation theory: both entail disruptions in metacognition.

Cold control theory leaves some questions open, like precisely how this dissociation comes about, but it’s no different than other dissociation theories in that respect. It also doesn’t explain how skilled readers can perceive familiar words as

meaningless gibberish. Derek Besner has argued that the Stroop effect may not be quite so automatic as we might like to think it is (e.g., Besner & Stolz, 1999), but still....

Speaking of demand characteristics. I think our readers would find this an interesting topic within the world of hypnosis, and I'm interested in your thoughts. For instance, how much of hypnotic response in experiments do you think is down to the demand characteristics of the situation? It would appear that Graham Wagstaff would say almost all of it, but I guess you'd disagree. Where do you think Nick Spanos would position himself on this? Was his social role-play all demand characteristics, do you think? Does that differ from Barber, Sarbin, Coe, and more recently, Kirsch?

I try to avoid comparing and contrasting theories of hypnosis. The question of how much of hypnosis is attributable to demand characteristics is at least as old as Martin Orne's "Artifact and Essence" paper (Orne, 1959). This debate tends to get framed in terms of "state-nonstate", but I prefer to think of the terms of the debate as "nothing but" versus "something more" (Kihlstrom, 1993). That is, is hypnosis simply a special case of some general principle – is it "nothing but" suggestion (a view that goes back to the debate between Charcot and Bernheim) or compliance, or role-playing, or imagination? Or does hypnosis tell us something about how the mind works that we didn't know before? The theorists you cite here are all part of the "sociocognitive" camp, which is actually more "socio" and less "cognitive" – more inclined to explain hypnosis in terms of conventional social-psychological constructs that refer to factors that lie "outside" the subject, and less inclined to look "inside" for cognitive mechanisms like disrupted retrieval or familiarity-based recognition in posthypnotic amnesia.

For example, you're right that compliance lies at the heart of Graham Wagstaff's theorizing (e.g., Wagstaff, 1991), which would seem to imply that hypnotic subjects are just going through the motions. But social psychologists distinguish between

compliance at the level of behavior and compliance at the level of belief; and Wagstaff acknowledges that compliance in hypnosis can be of the latter kind, such that subjects really believe that they are five years old again, or can't remember what they've been doing while they were hypnotized. Still, these changes in belief are held to be mediated by ordinary social-psychological processes, such as persuasion or causal attribution.

So the “sociocognitive” theorists are also more complicated than would sometimes seem to be the case. Take Sarbin's role theory of hypnosis (Coe & Sarbin, 1977, 1991; Sarbin, 1950, 1954; Sarbin & Allen, 1968; Sarbin & Coe, 1972). As a sociological social psychologist, Sarbin was more interested in explanatory constructs that lie outside the individual – not inside, like mental states in general, much less altered states of consciousness (Scheibe & Barrett, 2016). Sarbin did not invent role theory, though he became its leading proponent; and he didn't apply it solely to hypnosis – he thought that mental illness was a role, too. But hypnosis was the model interaction he used to illustrate the theory. He always insisted that he didn't mean that hypnosis was merely play-acting, but his application of what he called the “dramaturgical metaphor” – that both hypnotist and subject are engaged in a performance the success of which depends on such factors as expectations, role demands, role skills, and reinforcement by the audience, conveys just such an impression. Interestingly, the list of role skills includes hypnotizability, reminding us that Sarbin devised a predecessor to the Stanford scales (Friedlander & Sarbin, 1938) – though, contrary to the current consensus, he denied the structural complexity of hypnotizability (Coe & Sarbin, 1971). More important in the present context, Sarbin and Coe (1972) included role involvement (actually, “organismal involvement”) in his list of

determinants of successful role enactment. From his point of view, subjects could become so involved in playing the hypnotic role that they forget they were role-playing – as in Stanislavskian “Method” acting, where the actors become the characters they’re playing. This sounds suspiciously like an altered state of consciousness to me! Maybe that’s why role involvement dropped out of the final statement of the theory (Coe & Sarbin, 1991).

Sometimes, the theorists themselves evolve. For a long time, Ted Barber (1969) dismissed the idea of hypnosis as an altered state of consciousness, or even something real, going so far as to write “hypnosis” in scare quotes, and arguing that hypnotic effects could be produced in anyone who had positive attitudes, motivations, and expectancies – what he summarized as “task motivation”. There’s a notorious study (Barber & Calverley, 1964) in which Barber tested student nurses’ performance on the Barber Suggestibility Scale: one group was retested after receiving task-motivation instructions, which end with the injunction that “If you don’t try to the best of your ability, this experiment will be worthless and I’ll tend to feel silly. On the other hand, if you try to imagine to the best of your ability, you can easily imagine and do the interesting things I tell you and you will be helping this experiment and not wasting any time” (Barber, 1969, p. 46). Another group received a lecture from their supervisor to the effect that the hospital’s doctors believed that the nurses were too gullible, and that their behavior in the research study showed that they were “too easily directed and easily led in their responses to suggestions”. Compared to baseline, the scores of the task-motivation group went up, while those in the other group dropped to the floor. These results were claimed to support the hypothesis that attitudes were an important

determinant of response to hypnotic suggestions, but it's hard to see task motivation, and by extension hypnosis itself, as involving much more than ordinary social compliance. It's not surprising, then, that Ken Bowers found that performance following task-motivation instructions was corrected downward by honesty demands (Bowers, 1967). Later, however, largely under the influence of Nick Spanos and John Chaves, Barber got a little less behavioristic and a little more cognitive, and he linked himself to the New-Age-y human potentials movement (Barber, Spanos, & Chaves, 1974). Toward the end of his life (he died in 2005), he realized that highly hypnotizable subjects really had a different experience compared to other subjects: the scare quotes were gone and he was sounding like a state theorist (Barber, 1999a, 1999b, 1999c).

Nick Spanos presented a tangle of complexities. Just by virtue of the sheer number of papers he published, and his relentless focus on hypnosis and related topics (like multiple personality disorder), he must count as the leading sociocognitive theorist of hypnosis. But for all that energy devoted to the topic, he sometimes seemed to have a dismissive attitude toward the whole enterprise. At the very least, he sometimes took the role of provocateur. For example, the Carleton University Responsiveness to Suggestion Scale is so awkwardly named that one would be forgiven for thinking it was chosen simply for the acronym (Spanos, Radtke, Hodgins, Stam, & Bertrand, 1983). He explained subjects' reports of involuntariness as attributional errors (Spanos & DeGroh, 1983), which at least implies that subjects believed their own self-reports; but he also explained their reported inability to resist suggestions as a self-presentational strategy designed to convince observers that they were deeply hypnotized – implying that they were just going through the motions after all (Spanos et al., 1985). Like Ted Barber, he

claimed that hypnotizability could be improved when subjects adopted appropriate expectations and motivations (Spanos, Robertson, Menary, & Brett, 1986); but the Carleton Skills Training Program, which incorporated these principles into a method for enhancing hypnotizability, was thoroughly laced with compliance (Bates & Kraft, 1991). Sometimes, Nick just seemed to be wrong: he explained hypnotic analgesia in terms of subjects employing various stress-inoculation strategies like self-distraction (Spanos, 1986c), but a series of studies by Bowers and Miller showed that, unlike hypnotic analgesia, the success of these strategies was not correlated with hypnotizability (Miller & Bowers, 1986, 1993). Other times, he just missed the boat. When I reported that posthypnotic amnesia affected episodic but not semantic memory (Kihlstrom, 1980), he reversed the effect by changing the wording of the amnesia suggestion (Spanos, Radtke, & Dubreuil, 1982). The implication was that subjects were just doing what they were told, when what he discovered was hypnotic agnosia – the word-blindness that Amir Raz found to reverse the Stroop effect (Raz et al., 2002). As I said before, that’s the most interesting finding in the last 20 years of hypnosis research. Nick had observed it 20 years earlier -- and, frankly, Fred Evans (1971) had seen it 10 years before that, but never published it; but Nick just wrote it off as just another artifact of the wording of the suggestion. Similarly, he showed that hypnotically deaf subjects showed the deleterious effects of delayed auditory feedback, concluding that “Now you hear it – now you still hear it” (Spanos, Jones, & Malfara, 1982), instead of thinking it might reflect a dissociation between explicit and implicit perception (Kihlstrom, Barnhardt, & Tataryn, 1992). I’m sure, when he turned his attention to warts, he didn’t expect hypnosis to prove better than placebo (Spanos et al., 1988; Spanos, Williams, et al.,

1990), and it was unfortunate that he died before he could get closure on his repeated finding to the contrary. Still, like Ted Barber, at his best Nick challenged us to think more clearly about hypnosis, and to do better research.

I greatly respect Irving Kirsch's work on placebo effects, but I think it's a mistake for him to characterize hypnosis as a "nondeceptive placebo" (Kirsch, 1994, 2023). In the first place, there's an old finding from Orne's lab (McGlashan, Evans, & Orne, 1969), subsequently replicated by Kirsch himself (Baker & Kirsch, 1993), that shows pretty clearly that there's more to hypnotic analgesia than placebo. Of course, every treatment has a placebo component, because every treatment is administered in some psychosocial context. But even if hypnotic analgesia and placebo analgesia were perfectly correlated, that wouldn't prevent there being a significant difference between the means. Even if hypnosis were nothing but a placebo, it wouldn't be a *nondeceptive* placebo, because it would be presented to patients as if it were an active treatment with specific effects. Physicians don't like to prescribe placebos, and insurance companies don't like to pay for them – and I suspect that patients don't like to take them, because they imply that their illnesses are "all in their heads". So presenting hypnosis as any kind of placebo not only misrepresents the actual state of affairs but impairs the adoption of hypnosis by empirically oriented clinicians who prefer treatments that really work.

Together with Steve Lynn, Irving has proposed a theory of hypnosis that has all the features of your typical sociocognitive approach, such as a focus on motivation, expectations, and the importance of context (Kirsch & Lynn, 1995; Lynn, Laurence, & Kirsch, 2015). But it also has some unique features. First, they acknowledge that

hypnosis involves “fascinating and perplexing alterations in consciousness” (2015, p. 314) – which is all any reasonable “state theorist” can ask. They don’t endorse any “state” theory, because they argue that the same effects can be achieved through non-hypnotic suggestions. That may be true, to some extent -- though if it’s only true for hypnotizable subjects, that casts somewhat different cast light on the claim. Second, they go beyond ordinary-language social-cognitive constructs like “expectations”, “self-fulfilling prophecies”, and “attributional error” (e.g., Spanos, 1986b) and adopt the technical vocabulary of cognitive psychology in a way that other socio-cognitive theorists haven’t done. A prime example is their treatment of experienced involuntariness, where they invoke the familiar distinction between automatic and controlled processes (Kirsch & Lynn, 1997, 1999). Personally, I think that arguments about “the automaticity of everyday life” (Bargh, 1997) and “the unbearable automaticity of being” (Bargh & Chartrand, 1999) go too far (Kihlstrom, 2008a). All too often, especially in social psychology, the concept of automaticity is applied all too loosely. But still, Kirsch and Lynn are trying to take a new perspective on hypnosis, with contributions from both social and cognitive psychology, and even venturing into cognitive neuroscience. They’ve added “something more” to the usual “nothing but”.

How well did you know George Estabrooks? His book, *Hypnotism*, contains some fantastic stories – do you know his book and, if so, what do you think of his tales? Were you ever involved in his hypnotic demonstrations?

I can’t claim to have known Estabrooks well. By the time I got to Colgate, he had retired and Edmonston had been hired to replace him, so he was the kind of “campus character” you find around colleges and universities. He’d show up in the Department,

or the Student Union, and talk with any students who were interested. And I was one of those students: he was a very interesting guy. I wrote about him a little as a sidebar to an article that Ed Frischholz and I did on Bill Edmonston – part of a projected series of portraits of editors of the *American Journal of Clinical Hypnosis* that was cut short when Ed died (Kihlstrom & Frischholz, 2010). Estabrooks was Canadian and took his bachelor's degree from what is now Acadia University in Nova Scotia. At Acadia, he had been a student of George Barton Cutten, a psychologist who pioneered the use of hypnosis in the treatment of alcoholism (Cutten, 1903a, 1903b). Cutten became president of Acadia, and when he became president of Colgate he brought Estabrooks onto the faculty.

Cutten himself was an interesting person. He had Yale double doctorates, in divinity as well as psychology. He took a leave from Acadia to serve with the Canadian Army in World War I, and afterward led rehabilitation efforts for soldiers who suffered from physical and mental trauma. He pulled Colgate out of severe financial difficulty. As an educator, he was a visionary who established an innovative "core curriculum" approach to general education that still defines the Colgate experience: not just a "great books" course, as at Chicago, but covering the natural and social sciences as well; not just a distribution requirement, but a scheme where all students had about one-quarter of their coursework in common. For these accomplishments, when I was there in the 1960s, Colgate named a big, new, beautiful, upper-class residential complex for him. On the other hand, Cutten was also an avowed racist and antisemite, and a proponent of eugenics. He thought that Jim Crow should be extended to "poor white trash" as well Blacks, and he did everything he could to keep Blacks and Jews out of Colgate. One of

his screeds, to the effect that the American “melting pot” would destroy the white race, is inscribed (with intentional irony) on a wall at the National Immigration Museum, on Ellis Island. Those might have been acceptable attitudes in the 20s and 30s, but by the 60s they were in bad odor, and rightly so; and so, for his sins, Colgate removed his name from the complex.

Anyway, back to Estabrooks. Before college he also enlisted in the Canadian Expeditionary Forces to serve in World War I – at age 19, already a commissioned officer. He saw action in the Second Battle of Ypres – where the Germans first used poison gas. He saw his first demonstration of hypnosis in a “USO”-type entertainment for the troops. After his discharge he enrolled at Acadia, which is where he encountered Cutten. He was a Rhodes Scholar, and he did his first hypnosis experiments at Oxford (Estabrooks, 1929a). He then enrolled at Harvard, in a PhD program offered by the then-new Graduate School of Education. His doctoral dissertation, possibly inspired by Cutten, was on racial differences in intelligence. Interestingly, he concluded that these were impossible to determine, because of three problems: the inability to rule out environmental factors (suggesting that he considered “race” to be a biological construct), ambiguities surrounding “race”, and difficulty defining “intelligence” (Estabrooks, 1928a, 1928b, 1931b). Minor problems!

Estabrooks’s PhD was in Education, but he spent a lot of time over in the Psychology Department, where William McDougal was sponsoring the pioneering hypnosis research by P.C. Young (1925, 1926a, 1926b, 1927), and Gardner Murphy was exploring various parapsychological phenomena. In addition to his dissertation research, he did one of the very earliest experiments on telepathy (Estabrooks,

1927/1961), the positive results of which led McDougall and Murphy to arrange a postdoctoral fellowship, sponsored by one of the “spook funds” that places like Harvard had (and still have), to follow up on those findings. Instead, Estabrooks decided to take a teaching job at Springfield College: the person who took over the fellowship was – wait for it! – J.B. Rhine.

When Estabrooks moved to Colgate, he restarted his work on hypnosis, picking up where he had left off at Oxford (Estabrooks, 1929b). He was the first to record a standardized hypnotic induction (Estabrooks, 1930c), and he did the first psychophysiological study of hypnosis, examining what we now call the electrodermal response (Estabrooks, 1930b). But, you know, that’s about it. His little book on *Hypnotism* (1943/1957), and another one on *Spiritism* (Estabrooks, 1947) may have done a lot to shape public understanding of hypnosis, but as I remember it promoted a lot of inaccurate beliefs about its persuasive and coercive powers. For example, he thought that Adolph Hitler was a great hypnotist, and that the German people had been hypnotized into submission (Estabrooks, 1951, 1962a, 1971). He tried to persuade the FBI, OSS, and CIA that hypnosis could be useful in the training and detection of what he called “superspies”, and probably helped precipitate the CIA’s interest in “mind control” techniques. But in the end, Estabrooks’s greatest contribution to hypnosis was in organizing a big symposium at Colgate, which brought leading authorities together, both researchers and clinicians, at the beginning of what might be called the “golden age” of hypnosis research (Estabrooks, 1962b).

I said earlier that nobody ever placed an ad for a Professor of Hypnosis, and at first glance Estabrooks might seem like the exception that proves the rule: Cutten, a

hypnotist, hired Estabrooks, another hypnotist. But Estabrooks wasn't hired as a hypnosis researcher: at the time, Colgate faculty were hired because they were *teachers* first and foremost; research was very much downplayed. There's a reason that his PhD was from Harvard's Graduate School of Education: he had an abiding interest in educational policy and practice. Cutten knew that even as an undergraduate – an older, returning student marked by the Great War – Estabrooks was active with the campus YMCA to establish a Freshman Orientation Week, which was not a common feature of North American campus life at the time (Finnegan & Alleman, 2013). Not only did he chair the Psychology Department for almost 30 years; he directed its Office of Student Placement for even longer (Estabrooks, 1929d). He was concerned with the adverse effects that a student's personality and adjustment might have on success in college (Estabrooks, 1929c; Steen & Estabrooks, 1928). With a colleague he added a new scale to the Strong Vocational Interest Blank (C. W. Young & Estabrooks, 1937).

Estabrooks continued to study intelligence, though he left the topic of racial differences largely behind. A study comparing observers' impressions of intelligence with targets' actual IQ test scores might count as an early study of impression-formation (Ackerson & Estabrooks, 1928). A study of word-associations anticipated Rosenthal's (1963) classic studies of experimenter bias by more than 30 years; in retrospect, we can also see it as perhaps the first study of social priming (Estabrooks, 1930a). He devised an innovative system of note-taking (Estabrooks, 1927c); and long before cognitive psychologists took an interest in mnemonic devices (Bower, 1970; Roediger, 1980), he taught the method of loci to facilitate the memorization of lists and sequences

(Estabrooks, 1927a). Most important, from a teacher's standpoint, anyway, he invented the short-answer test (Estabrooks, 1927b).

More seriously, Estabrooks argued that the purpose of a college education is to develop the personality as well as the mind (Estabrooks, 1931a); and that, in the 20th century, education was for democracy as well as for the intellect (Estabrooks, 1932). In the midst of the Great Depression, he argued that colleges could institute an OxBridge-like tutorial system without incurring additional costs (Estabrooks, 1934). His last article on hypnosis closed the loop: a pilot study to determine whether hypnosis could enhance motivation in "underachieving" students (Estabrooks & May, 1965).

(I think that's more than you wanted to know about Estabrooks, and I apologize. But you asked! And I did know him, a little, and he is an important figure from the early years of 20th-century hypnosis who shouldn't be forgotten.)

What is your view of stage hypnosis? We have a performer in the UK, Derren Brown, who often tricks people (including psychology students) into thinking he is demonstrating psychological principles when he is actually performing magic. Are you aware of his work (he sold out a Broadway run in recent years), and what do you think of him or performers who might enthrall people into psychology, albeit through trickery?

I don't know of Derren Brown, and the closest I've ever come to stage hypnosis is a reprint request from The Amazing Kreskin – who, it turns out, really follows psychology. Nor have I ever done public demonstrations of hypnosis – despite numerous invitations from fraternities and sororities to do so. For me, hypnosis is serious business, not entertainment. The only exception was one classroom demonstration, in a "freshman seminar" specifically on the topic of hypnosis. Instead, I've shown students two videos made by Martin Orne in the late 50s and 60s for

American and Canadian public television. They're old, and they've been digitized from 35mm film transferred from kinescopes, so their quality isn't the greatest, but they contain beautiful demonstrations of the kinds of phenomena that have kept psychologists interested in hypnosis for more than 100 years. They're now posted to YouTube at

https://www.youtube.com/watch?v=OVhGtrjgP7M&ab_channel=JohnF.KIHLSTROM

and https://www.youtube.com/watch?v=blZyGk-1K1U&ab_channel=JohnF.KIHLSTROM.

I've just always figured that "stage hypnosis" was more "stage" than "hypnosis". Here's a story: Jack and Josephine Hilgard were vacationing; the night club at their hotel was featuring a stage hypnotist, and they decided to go. At one point the performer invited members of the audience to come up onto the stage, and Josie, who had an impish sense of humor, joined the group. Somehow the performer recognized them, because as she came up on the stage, he whispered, "We're all professionals here". She didn't spoil the show. And speaking of professionals, frankly, I'm less concerned about stage hypnosis than I am about professionals using hypnosis inappropriately. The "recovered memory" fiasco is a good example. Martin Orne always reminded his students: nobody should treat something with hypnosis that they're not qualified to treat *without* hypnosis.

The Orne sentiment in your last sentence is interesting and one that I often ask academics and lay hypnotists about. In your view, what does it mean to be 'qualified' to treat, for example, phobias? This seems to be a common offering of hypnotherapists, many of whom (in the UK at least) have no formal qualifications in clinical psychology.

Although I identify as an experimental cognitive social psychologist, I do have clinical training and interests. I've written a lot on "hysteria" and the dissociative disorders, for example (e.g., Kihlstrom, 1994a, 2001a, 2005); and with my wife Lucy, who has a PhD in health policy research, I've written about issues in clinical training and various aspects of health cognition and behavior (Kihlstrom & Kihlstrom, 1998, 1999). My own clinical training emphasized research, and was the forerunner to today's "clinical science" model. My internship was organized according to the traditional team model: everybody did psychotherapy, but the psychiatrists were in charge of the patient's overall treatment program, and prescribed medication; the psychologists did the psychological testing (and were cautioned never, never to reveal to the medical interns and psychiatric residents how to score the Rorschach!); and the social worker dealt with the patient's family, workplace, aftercare, and outplacement.

One of the attitudes that I took out of that experience was that everybody should stay in their lane. Unless you're talking about stage hypnotists, for example, I don't know what you mean by "lay hypnotists". Medicine, psychotherapy, and other health professions should be practiced by professionals who are qualified, by virtue of their training, experience, and licensure to practice them. The gold standard for the treatment of phobias is some form of cognitive behavior therapy, such as systematic desensitization, and people who aren't trained in the technique shouldn't be doing it – whether they're psychiatrists, psychologists, clinical social workers, or marriage and family therapists; if you do it wrong, the patient is going to be worse off than they were before. I've been on the hypnosis listserv sponsored by SCEH and ASCH since the beginning, and I can't count the number of times someone has written in asking for

advice about how to work with a patient with such-and-such a disorder. My first question always is: “What makes you (or the patient) think hypnosis can help?”. Hypnosis isn’t a panacea, and it’s not the right treatment for every disorder – or every patient. And the second one is: “What makes you think you are competent to treat this?”. This isn’t some status thing about doctors versus CSWs or MFTs. It’s a matter of training. I’m opposed to prescription privileges for clinical psychologists, for example, but I’m quite happy for nurse practitioners to have them. Just because you can induce hypnosis – which, after all, anyone can do, because all the action is in the subject – doesn’t mean you’re competent to use hypnosis to treat every medical, dental, or psychological problem.

Talking of books, we would like to ask if you have favourite academic hypnosis books (obviously excluding any of your own), and favourite fictional hypnosis books and films? Michael Heap liked the film *Compliance*, which featured no hypnosis, but highlighted some of the things people will do because of perceived authority. Amanda Barnier liked the hypnosis scenes in *Dead Again*; and Zoltan Dienes thought hypnosis portrayal in fiction was usually terrible, to give a few examples of answers we’ve already had. We particularly like the thriller book, *False Memory*, and the hypnosis machine featured in the (terrible) *Exorcist 2*.

Well, let’s do the fictional portrayals first, because that’s easy (and short): my hands down favorite is *Trilby* – both the George du Maurier 1895 novel and *Svengali*, the 1931 movie adaptation directed by Archie Mayo starring Lionel Barrymore and Marian Marsh. Nothing else comes close. I emceed a showing of the movie at the SCEH meetings in the 1980s, and later expanded my remarks for publication (Kihlstrom, 1987b). *Svengali* captured the myth of hypnosis and gave hypnosis its popular image: the special power of the hypnotist, male dominance and female

submissiveness, transcendence of normal voluntary capacity, the harmfulness of repeated use, spontaneous amnesia – the whole schmeer.

Second is *The Manchurian Candidate*, both the Richard Condon novel and the John Frankenheimer movie starring Frank Sinatra, Angel Lansbury, and a host of other great stars. Sinatra's greatest performance, among many great ones. Lansbury even more evil than in *Gaslight* (or *Sweeney Todd*). Along these lines, and bringing us back to Estabrooks, I should mention *The Search for the Manchurian Candidate*, by John Marks (1979), an investigative reporter (and brother of UCLA psychologist Patricia Marks Greenfield) who exposed the CIA's secret program testing various ostensible mind-control techniques, including hypnosis.

Svengali and *The Manchurian Candidate* get hypnosis all wrong, of course, but nobody reads fiction, or goes to the movies, to get an accurate picture of hypnosis. Hypnosis is a plot device, nothing more. Regardless of the accuracy with which they portray hypnosis, we enjoy these cultural products because of the artistry that went into them.

Actually, I keep a little list of books and movies in which hypnosis plays a role: <https://www.ocf.berkeley.edu/~jfkhlstrom/HypnosisLiteratureFilm.htm>, and I welcome people writing in with new contributions. In this respect, I should also mention the two-volume collection of "Hypnotism in Victorian and Edwardian Era Fiction", edited by Donald K. Hartman.

As far as academic books go, like Estabrooks's two books, most of my hypnosis collection fell to downsizing when I retired (you can probably find many of them on AbeBooks.com or Alibris.com). But some items stayed on my shelves: the two

anthologies edited by Fromm and Shor (1972, 1979), which contain Ron's last theoretical statements; the third edition in that series, edited by Fromm and Nash (1992); and, of course, the *Oxford Handbook of Hypnosis* edited by Nash and Barnier (2008). Hilgard's books, of course, especially *Hypnotic Susceptibility* (1965) and *Divided Consciousness* (1977). An earlier anthology of articles on hypnosis edited by Shor and Orne (1965). Tinterow's (1970) collection of documents relating to mesmerism and early hypnotism, and Gauld's (1992) magisterial history of hypnosis. Lynn and Rhue's (1991) edited book on *Theories of Hypnosis*, as well as Sheehan and Perry's (1976) early treatise on *Methodologies of Hypnosis*, which is as much about theories as it is about methods. Laurence and Perry's (1988) *Hypnosis, Will, and Memory*, which provides the deep historical background for debates about the hypnotic coercion of antisocial behavior and the recovery of memory. Finally, Sheehan and McConkey's (1982) *Hypnosis and Experience*, which reminds us that what's really interesting about hypnosis is not the subjects' overt behavioral responses, but rather their inner subjective experiences.

But my real hands-down, all-time favorite is *Hypnosis for the Seriously Curious* by Ken Bowers (1976). The title says it all, and it's beautifully done. Bowers had a knack for getting thorny theoretical and methodological issues across, and for presenting experiments faithfully without getting bogged down in detail. It's out of print, but well worth finding on the used-book market, just for its example of how an updated book for "the seriously curious" would look like today.

References

- Abelson, R. P. (1963). Computer simulation of "hot cognition". In S. S. Tomkins & S. Messick (Eds.), *Computer simulation of personality* (pp. 277-298). New York: Wiley.
- Ackerson, L., & Estabrooks, G. H. (1928). On the correlation of intelligence test scores with imputed intelligence. *British Journal of Psychology*, *18*, 455-459.
- Baker, S. L., & Kirsch, I. (1993). Hypnotic and placebo analgesia: Order effects and the placebo label. *American Journal of Clinical Hypnosis*, *10*, 117-126.
- Barber, T. X. (1969). *Hypnosis: A scientific approach*. New York: Van Nostrand Reinhold.
- Barber, T. X. (1999a). A comprehensive three-dimensional theory of hypnosis. In K. Kirsch, A. Capafons, E. Cardena & S. Amigo (Eds.), *Clinical hypnosis and self-regulation: Cognitive-behavioral perspectives* (pp. 21-48). Washington, D.C.: American Psychological Association.
- Barber, T. X. (1999b). The essence and mechanism of superb hypnotic performances. *Contemporary Hypnosis*, *16*(3), 192-208.
- Barber, T. X. (1999c). Hypnosis: A mature view. *Contemporary Hypnosis*, *16*, 123-127. doi: <http://dx.doi.org/10.1002/ch.161>
- Barber, T. X., & Calverley, D. S. (1964). Empirical evidence for a theory of "hypnotic" behavior: Effects of pretest instructions on response to primary suggestions. *Psychological Record*, *14*, 457-467.
- Barber, T. X., & Calverley, D. S. (1966). Toward a theory of "hypnotic" behavior: Experimental analyses of suggested amnesia. *Journal of Abnormal Psychology*, *71*(2), 95-107. doi: <http://dx.doi.org/10.1037/h0023096>
- Barber, T. X., Spanos, N. P., & Chaves, J. F. (1974). *Hypnosis, imagination, and human potentialities*. New York: Pergamon.
- Bargh, J. A. (1997). The automaticity of everyday life. In R. S. Wyer (Ed.), *Advances in social cognition* (Vol. 10, pp. 1-61). Mahwah, N.J.: Erlbaum.
- Bargh, J. A., & Chartrand, T. L. (1999). The unbearable automaticity of being. *American Psychologist*, *54*(7), 462-479. doi: <http://dx.doi.org/10.1037/0003-066X.54.7.462>
- Barnier, A. J., Bryant, R. A., & Briscoe, S. (2001). Posthypnotic amnesia for material learned before or during hypnosis: Explicit and implicit memory effects.

- International Journal of Clinical & Experimental Hypnosis*, 49(4), 286-304. doi: <http://dx.doi.org/10.1080/00207140108410079>
- Basden, B. H., Basden, D. R., Coe, W. C., Decker, S., & Crutcher, K. (1994). Retrieval inhibition in directed forgetting and posthypnotic amnesia. *International Journal of Clinical & Experimental Hypnosis*, 42, 184-203. doi: <http://dx.doi.org/10.1080/00207149408409351>
- Bates, B. L. (1992). The effect of demands for honesty on the efficacy of the Carleton Skills Training Program. *International Journal of Clinical & Experimental Hypnosis*, 40, 88-102. doi: <http://dx.doi.org/10.1080/00207149208409650>
- Bates, B. L., & Kraft, P. M. (1991). The nature of hypnotic performance following administration of the Carleton Skills Training Program. *International Journal of Clinical & Experimental Hypnosis*, 39(4), 227-242. doi: <http://dx.doi.org/10.1080/00207149108409638>
- Bates, B. L., Miller, R. J., Cross, H. J., & Brigham, T. A. (1988). Modifying hypnotic suggestibility with the Carleton Skills Training Program. *Journal of Personality and Social Psychology*, 55(1), 120-127. doi: <http://dx.doi.org/10.1037/0022-3514.55.1.120>
- Besner, D., & Stolz, J. A. (1999). Unconsciously controlled processing: The Stroop effect reconsidered. *Psychonomic Bulletin & Review*, 6(3), 449-455. doi: <https://doi.org/10.3758/BF03210834>
- Bower, G. H. (1970). Analysis of a mnemonic device. *American Scientist*, 58, 496-510.
- Bowers, K. S. (1967). The effect for demands of honesty upon reports of visual and auditory hallucinations. *International Journal of Clinical and Experimental Hypnosis*, 15, 31-36. doi: <http://dx.doi.org/10.1080/00207146708407503>
- Bowers, K. S. (1976). *Hypnosis for the seriously curious*. New York: Norton.
- Bowers, K. S., & Gilmore, J. B. (1969). Subjective report and credibility: an inquiry involving hypnotic hallucinations. *Journal of Abnormal Psychology*, 74(4), 443-451. doi: <http://dx.doi.org/10.1037/h0027745>
- Bowers, K. S., & Kelly, P. (1979). Stress, disease, psychotherapy, and hypnosis. *Journal of Abnormal Psychology*, 88(5), 506-526. doi: <http://dx.doi.org/10.1037/0021-843X.88.5.490>
- Bowers, K. S., & Woody, E. Z. (1996). Hypnotic amnesia and the paradox of intentional forgetting. *Journal of Abnormal Psychology*, 105(3), 381-390. doi: <http://dx.doi.org/10.1037/0021-843X.105.3.381>

- Coe, W. C., & Sarbin, T. R. (1971). An alternative interpretation to the multiple composition of hypnotic scales: A single role-relevant skill. *Journal of Personality and Social Psychology*, 18, 1-8.
- Coe, W. C., & Sarbin, T. R. (1977). Hypnosis from the standpoint of a contextualist. *Annals of the New York Academy of Sciences*, 296, 2-13.
- Coe, W. C., & Sarbin, T. R. (1991). Role theory: hypnosis from a dramaturgical and narrational perspective. In S. J. Lynn & J. W. Rhue (Eds.), *Theories of hypnosis: Current models and perspectives* (pp. 303-323). New York: Guilford.
- Cutten, G. B. (1903a). The case of John Kinsel. I. *Psychological Review*, 10(5), 465-497. doi: <https://doi.org/10.1037/h0070839>
- Cutten, G. B. (1903b). The case of John Kinsel. II. *Psychological Review*, 10(6), 615-632. doi: <https://doi.org/10.1037/h0071743>
- Damaser, E., Whitehouse, W. G., Orne, M. T., Orne, E. C., & Dinges, D. F. (2010). Behavioral persistence in carrying out a posthypnotic suggestion beyond the hypnotic context: A consideration of the role of perceived demand characteristics. *International Journal of Clinical and Experimental Hypnosis*, 58(1), 1-20. doi: <http://dx.doi.org/10.1080/00207140903316201>
- David, D., Brown, R., Pojoga, C., & David, A. (2000). The impact of posthypnotic amnesia and directed forgetting on implicit and explicit memory: New insights from a modified process dissociation procedure. *International Journal of Clinical & Experimental Hypnosis*, 48(3), 267-289. doi: <http://dx.doi.org/10.1080/00207140008415246>
- Deikman, A. J. (1966). De-automatization and the mystic experience. *Psychiatry*, 29(4), 324-338.
- Dienes, Z., & Perner, J. (2007). Executive control without conscious awareness: The cold control theory of hypnosis. In G. A. Jamieson (Ed.), *Hypnosis and conscious states: The cognitive neuroscience perspective* (pp. 293-314). Oxford: Oxford University Press.
- Dinges, D. F., Kihlstrom, J. F., & McConkey, K. M. (2017). In memoriam: Emily Carota Orne, 1938-2016. *International Journal of Clinical & Experimental Hypnosis*, 65(1), 1-3.
- Dorfman, J., Kihlstrom, J. F., Cork, R. C., & Misiaszek, J. (1995). Priming and recognition in ECT-induced amnesia. *Psychonomic Bulletin & Review*, 2(2), 244-248. doi: <http://dx.doi.org/10.3758/BF03210964>

- Edmonston, W. E. (1977). Neutral hypnosis as relaxation. *American Journal of Clinical Hypnosis*, 20(1), 69-75. doi: <https://doi.org/10.1080/00029157.1977.10403902>
- Edmonston, W. E. (1981). *Hypnosis and relaxation: Modern verification of an old equation*. New York: Wiley.
- Edmonston, W. E. (1991). Anesis. In S. J. Lynn & J. W. Rhue (Eds.), *Theories of hypnosis: Current models and perspectives* (pp. 197-237). New York: Guilford.
- Edmonston, W. E. (2000). Frank A. Pattie, PhD: In Memoriam. *American Journal of Clinical Hypnosis*, 43(2), 105.
- Estabrooks, G. H. (1927a). A handy memory trick. *Pedagogical Seminary*, 34, 615-619.
- Estabrooks, G. H. (1927b). A new type of objective examination. *Pedagogical Seminary*, 34, 368-372. doi: <https://doi.org/10.1080/08856559.1927.10532389>
- Estabrooks, G. H. (1927c). A system of note-taking. *School & Society*, 26, 715-717.
- Estabrooks, G. H. (1927/1961). A contribution to experimental telepathy. *Journal of Parapsychology*, 25, 190-213.
- Estabrooks, G. H. (1928a). The enigma of racial intelligence. *Journal of Genetic Psychology*, 35, 137-139. doi: <https://doi.org/10.1080/08856559.1928.10532145>
- Estabrooks, G. H. (1928b). A proposed technique for the investigation of racial differences in intelligence. *American Naturalist*, 62, 76-87. doi: <https://doi.org/10.1086/280188>
- Estabrooks, G. H. (1929a). Experimental studies in suggestion. *Journal of Genetic Psychology*, 36, 120-139.
- Estabrooks, G. H. (1929b). Mysterious mesmerism. *North America Review*, 227, 434-443.
- Estabrooks, G. H. (1929c). Suggestions as to the detection and treatment of personality difficulties in college students. *Mental Hygiene*, 4, 794-799.
- Estabrooks, G. H. (1929d). Vocational guidance at Colgate University. *Vocational Guidance Magazine*, 8, 76-78.
- Estabrooks, G. H. (1930a). The effect of the attitude of the operator on responses in free association. *Journal of Abnormal and Social Psychology*, 2(4), 80-481. doi: <https://doi.org/10.1037/h0071417>

- Estabrooks, G. H. (1930b). The psychogalvanic reflex in hypnosis. *Journal of General Psychology*, 3, 150-157. doi: <https://doi.org/10.1080/00221309.1930.9918194>
- Estabrooks, G. H. (1930c). A standardized hypotic technique dictated to a Victrola record. *American Journal of Psychology*, 42,(1), 115-116. doi: <http://dx.doi.org/10.2307/1414431>
- Estabrooks, G. H. (1931a). Personality training and the changing emphasis in the liberal arts college. *Journal of Applied Psychology*, 15(1), 96-99. doi: <https://doi.org/10.1037/h0072797>
- Estabrooks, G. H. (1931b). Which races are best? Why science cannot admit racial differences in intelligence. *Scientific American*, 144, 311-313.
- Estabrooks, G. H. (1932). A modern trend in college personnel work. *Personnel Journal*, 11, 91-96.
- Estabrooks, G. H. (1934). A contention. *Journal of Higher Education Outreach and Engagement*, 5, 365-366. doi: <https://doi.org/10.2307/1977495>
- Estabrooks, G. H. (1943/1957). *Hypnotism* (Rev. ed.). New York: Dutton.
- Estabrooks, G. H. (1947). *Spiritism*. New York: Dutton.
- Estabrooks, G. H. (1951). The possible antisocial use of hypnotism. *Personality*, 1, 294-299.
- Estabrooks, G. H. (1962a). The social implications of hypnosis. In G. H. Estabrooks (Ed.), *Hypnosis: Current problems* (pp. 224-237). New York: Harper & Row.
- Estabrooks, G. H. (1971). Hypnosis comes of age. *Science Digest*(April), 44-50.
- Estabrooks, G. H. (Ed.). (1962b). *Hypnosis: Current problems*. New York: Harper & Row.
- Estabrooks, G. H., & May, J. R. (1965). Hypnosis in integrative motivation. *American Journal of Clinical Hypnosis*, 7(4), 346-352. doi: <https://doi.org/10.1080/00029157.1965.10402443>
- Evans, F. J. (1967). Suggestibility in the normal waking state. *Psychological Bulletin*, 67(2), 114-129. doi: <http://dx.doi.org/10.1037/h0024086>
- Evans, F. J. (1971). Recent studies in posthypnotic amnesia. *SCEH, Chicago, October*.

- Evans, F. J., & Kihlstrom, J. F. (1973). Posthypnotic Amnesia as Disrupted Retrieval. *Journal of Abnormal Psychology, 82*(2), 317-323. doi: <http://dx.doi.org/10.1037/h0035003>
- Evans, F. J., & Orne, M. T. (1965). Motivation, performance, and hypnosis. *International Journal of Clinical and Experimental Hypnosis, 13*(2), 103-116. doi: <https://doi.org/10.1080/00207146508412932>
- Evans, F. J., & Orne, M. T. (1971). The disappearing hypnotist: The use of simulating subjects to evaluate how subjects perceive experimental procedures. *IJCEH, 19*(4), 277-296. doi: <http://dx.doi.org/10.1080/00207147108407173>
- Eysenck, H. J., & Furneaux, W. D. (1945). Primary and secondary suggestibility: An experimental and statistical study. *Journal of Experimental Psychology, 35*(6), 485-503. doi: <https://doi.org/10.1037/h0054976>
- Finnegan, D. E., & Alleman, N. (2013). The YMCA and the origins of American freshman orientation programs. *Historical Studies in Education, 25*(1), 95-111.
- Friedlander, J. W., & Sarbin, T. R. (1938). The depth of hypnosis. *Journal of Abnormal & Social Psychology, 33*(4), 453-475. doi: <http://dx.doi.org/10.1037/h0056229>
- Fromm, E., & Nash, M. R. (Eds.). (1992). *Contemporary hypnosis research*. New York: Guilford.
- Fromm, E., & Shor, R. E. (Eds.). (1972). *Hypnosis: Research developments and perspectives*. Chicago: Aldine/Atherton.
- Fromm, E., & Shor, R. E. (Eds.). (1979). *Hypnosis: Developments in research and new perspectives* (2nd ed.). New York: Aldine/Atherton.
- Gauld, A. (1992). *A history of hypnotism*. Cambridge, U.K.: Cambridge University Press.
- Glisky, M. L., & Kihlstrom, J. F. (1993). Hypnotizability and facets of openness. *International Journal of Clinical & Experimental Hypnosis, 41*(2), 112-123. doi: <http://dx.doi.org/10.1080/00207149308414542>
- Glisky, M. L., Tataryn, D. J., & Kihlstrom, J. F. (1995). Hypnotizability and mental imagery. *International Journal of Clinical & Experimental Hypnosis, 43*(1), 34-54. doi: <https://doi.org/10.1080/00207149508409374>
- Gudjonsson, G. H. (1984). A new scale of interrogative suggestibility. *Personality and Individual Differences, 5*(3), 303-314. doi: [https://doi.org/10.1016/0191-8869\(84\)90069-2](https://doi.org/10.1016/0191-8869(84)90069-2)

- Hilgard, E. R. (1965). *Hypnotic susceptibility*. New York: Harcourt, Brace, & World.
- Hilgard, E. R. (1977). *Divided consciousness: Multiple controls in human thought and action*. New York: Wiley-Interscience.
- Hilgard, E. R., Crawford, H. J., Bowers, P., & Kihlstrom, J. F. (1979). A tailored SHSS:C, permitting user modification for special purposes. *International Journal of Clinical & Experimental Hypnosis*, 27(2), 125-133. doi: <https://doi.org/10.1080/00207147908407552>
- Hilgard, E. R., & Tart, C. T. (1966). Responsiveness to suggestions following waking and imagination instructions and following induction of hypnosis. *Journal of Abnormal Psychology*, 71(3), 196-208. doi: <https://doi.org/10.1037/h0023323>
- Hull, C. L. (1933). *Hypnosis and suggestibility: An experimental approach*. New York: Appleton.
- Ikemi, Y., & Nakagawa, S. (1962). A psychosomatic study of contagious dermatitis. *Kyushu Journal of Medical Science*, 13, 335-352ff.
- Jaynes, J. (1976). *The origins of consciousness in the breakdown of the bicameral mind*. Boston: Houghton Mifflin.
- Kihlstrom, J. F. (1978). Context and cognition in posthypnotic amnesia. *International Journal of Clinical & Experimental Hypnosis*, 26(4), 246-267. doi: <http://dx.doi.org/10.1080/00207147808411251>
- Kihlstrom, J. F. (1980). Posthypnotic amnesia for recently learned material: Interactions with "episodic" and "semantic" memory. *Cognitive Psychology*, 12(2), 227-251. doi: [http://dx.doi.org/10.1016/0010-0285\(80\)90010-9](http://dx.doi.org/10.1016/0010-0285(80)90010-9)
- Kihlstrom, J. F. (1983). Instructed forgetting: Hypnotic and nonhypnotic. *Journal of Experimental Psychology: General*, 112(1), 73-79. doi: <http://dx.doi.org/10.1037/0096-3445.112.1.73>
- Kihlstrom, J. F. (1984). Conscious, subconscious, unconscious: A cognitive perspective. In K. S. Bowers & D. Meichenbaum (Eds.), *The unconscious reconsidered* (pp. 149-211). New York: Wiley.
- Kihlstrom, J. F. (1985a). Hypnosis. *Annual Review of Psychology*, 36, 385-418. doi: <https://doi.org/10.1146/annurev.ps.36.020185.002125>
- Kihlstrom, J. F. (1985b). Posthypnotic amnesia and the dissociation of memory. In G. H. Bower (Ed.), *Psychology of Learning and Motivation* (Vol. 19, pp. 131-178). New York: Academic.

- Kihlstrom, J. F. (1987a). The cognitive unconscious. *Science*, 237(4821), 1445-1452. doi: <http://dx.doi.org/10.1126/science.3629249>
- Kihlstrom, J. F. (1987b). The two Svengalis: Making the myth of hypnosis. *Australian Journal of Clinical & Experimental Hypnosis*, 15(2), 69-81.
- Kihlstrom, J. F. (1992). Dissociation and dissociations: A comment on consciousness and cognition. *Consciousness & Cognition*, 1(1), 47-53. doi: [http://dx.doi.org/10.1016/1053-8100\(92\)90044-B](http://dx.doi.org/10.1016/1053-8100(92)90044-B)
- Kihlstrom, J. F. (1993). Something more vs. nothing but [Review of Theories of hypnosis: Current models and perspectives ed. by S.J. Lynn & J.W. Rhue.]. *Journal of Pain & Symptom Management*, 8(5), 324-326.
- Kihlstrom, J. F. (1994a). One hundred years of hysteria. In S. J. Lynn & J. W. Rhue (Eds.), *Dissociation: Clinical and theoretical perspectives*. (pp. 365-394). New York, NY, USA: The Guilford Press.
- Kihlstrom, J. F. (1994b). The rediscovery of the unconscious. In H. Morowitz & J. L. Singer (Eds.), *The mind, the brain, and complex adaptive systems*. (pp. 123-143). Reading, MA, USA: Addison-Wesley Publishing Co, Inc.
- Kihlstrom, J. F. (1997a). Consciousness and me-ness. In J. D. Cohen & J. W. Schooler (Eds.), *Scientific approaches to consciousness* (pp. 451-468). Mahwah, N.J.: Erlbaum.
- Kihlstrom, J. F. (1997b). Convergence in understanding hypnosis? Perhaps, but perhaps not quite so fast. *International Journal of Clinical & Experimental Hypnosis*, 45(3), 324-332. doi: <https://doi.org/10.1080/00207149708416133>
- Kihlstrom, J. F. (1997c). Hypnosis, memory and amnesia. *Philosophical Transactions of the Royal Society: Biological Sciences*, 352, 1727-1732.
- Kihlstrom, J. F. (2001a). Dissociative disorders. In P. B. Sutker & H. E. Adams (Eds.), *Comprehensive handbook of psychopathology* (3rd ed., pp. 259-276). New York: Plenum.
- Kihlstrom, J. F. (2001b). Martin T. Orne (1927-2000). *American Psychologist*, 56(9), 754-755. doi: <https://doi.org/10.1037/0003-066X.56.9.754>
- Kihlstrom, J. F. (2002a). Demand characteristics in the laboratory and the clinic: Conversations and collaborations with subjects and patients. *Prevention & Treatment [Special issue honoring Martin T. Orne]*, 5(1), Article_36c. doi: <http://dx.doi.org/10.1037/1522-3736.5.1.536c>

- Kihlstrom, J. F. (2002b). Mesmer, the Franklin Commission, and hypnosis: A counterfactual essay. *International Journal of Clinical & Experimental Hypnosis*, 50(4), 408-419. doi: <http://dx.doi.org/10.1080/00207140208410114>
- Kihlstrom, J. F. (2002c). The Seductions of Materialism and the Pleasures of Dualism. *Journal of Consciousness Studies*, 9(11), 30-34.
- Kihlstrom, J. F. (2003). The fox, the hedgehog, and hypnosis. *International Journal of Clinical & Experimental Hypnosis*, 51(2), 166-189. doi: <http://dx.doi.org/10.1076/iceh.51.2.166.14611>
- Kihlstrom, J. F. (2005). Dissociative disorders. *Annual Review of Clinical Psychology*, 1, 227-253. doi: <http://dx.doi.org/10.1146/annurev.clinpsy.1.102803.143925>
- Kihlstrom, J. F. (2006). Frederick J. Evans. *American Journal of Clinical Hypnosis*, 49(1), 3-4. doi: <https://doi.org/10.1080/00029157.2006.10401546>
- Kihlstrom, J. F. (2008a). The automaticity juggernaut. In J. Baer, J. C. Kaufman & R. F. Baumeister (Eds.), *Psychology and free will* (pp. 155-180). New York: Oxford University Press.
- Kihlstrom, J. F. (2008b). The domain of hypnosis, revisited. In M. Nash & A. Barnier (Eds.), *Oxford handbook of hypnosis* (pp. 21-52). Oxford: Oxford University Press.
- Kihlstrom, J. F. (2008c). Placebo: Feeling better, getting better, and the problems of mind and body. *McGill Journal of Medicine*, 11, 212-214.
- Kihlstrom, J. F. (2009). "So that we might have roses in December": The functions of autobiographical memory. *Applied Cognitive Psychology*, 23, 1179-1192. doi: <http://dx.doi.org/10.1002/acp.1618>
- Kihlstrom, J. F. (2011). Prospects for De-Automatization [Commentary on "Can Suggestion Obviate Reading? Supplementing Primary Stroop Evidence with Exploratory Negative Priming Analyses" by A. Raz & N.K.J. Campbell]. *Consciousness & Cognition*, 20(2), 332-334. doi: <https://doi.org/10.1016/j.concog.2010.03.004>
- Kihlstrom, J. F. (2012). Unconscious processes. In D. Reisberg (Ed.), *Oxford Handbook of Cognitive Psychology* (pp. 176-186). Oxford: Oxford University Press.
- Kihlstrom, J. F. (2013a). *Hypnosis in mind and body [Plenary Address]*. Paper presented at the Society for Clinical and Experimental Hypnosis, Berkeley, Ca.
- Kihlstrom, J. F. (2013b). The person-situation interaction. In D. Carlston (Ed.), *Oxford handbook of social cognition* (pp. 786-805). New York: Oxford University Press.

- Kihlstrom, J. F. (2017). Kihlstrom, John F. In V. Zeigler-Hill & T. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. Online). New York: Springer.
- Kihlstrom, J. F. (2018). Hypnosis as an altered state of consciousness. *Journal of Consciousness Studies*, 25(11-12), 53-72.
- Kihlstrom, J. F. (2019). The motivational unconscious. *Personality & Social Psychology Compass*, 13(5), e12466. doi: <http://dx.doi.org/10.1111/spc3.12466>
- Kihlstrom, J. F. (2020a). Ecological validity and "ecological validity". *Perspectives on Psychological Science*, in press. doi: <https://doi.org/10.1177/1745691620966791>
- Kihlstrom, J. F. (2020b). Posthypnotic amnesia: Using hypnosis to induce forgetting. In D. Groome & M. Eysenck (Eds.), *Forgetting: Explaining memory failure*. Thousand Oaks, Ca.: SAGE.
- Kihlstrom, J. F. (2020c). Varieties of recollective experience. *Neuropsychologia*, in press. doi: <https://doi.org/10.1016/j.neuropsychologia.2019.107295>
- Kihlstrom, J. F. (2021a). Bicameral mentality, hypnosis, and the theory of mind. In M. Kuijsten (Ed.), *Conversations on Consciousness and the Bicameral Mind* (pp. in press). Henderson, Nv: Julian Jaynes Society.
- Kihlstrom, J. F. (2021b). Recognition in posthypnotic amnesia, revisited. *International Journal of Clinical & Experimental Hypnosis*, 69(3), 383-410. doi: <https://doi.org/10.1080/00207144.2021.1910827>
- Kihlstrom, J. F. (2021c). Second thoughts on the "hard problem" of consciousness (and the "easy problem," too). *Psychology of Consciousness*, 8(1), 85-87. doi: <http://dx.doi.org/10.1037/cns0000265>
- Kihlstrom, J. F. (2022a). Consciousness, the unconscious, and the self. *Psychology of Consciousness*, 9(1), 78-92. doi: <https://doi.org/10.1037/cns0000285>
- Kihlstrom, J. F. (2022b). Hypnosis, bicameral mentality, and the theory of mind. In M. Kuijsten (Ed.), *Conversations on Consciousness and the Bicameral Mind* (pp. 217-250). Henderson, Nv.: Julian Jaynes Society.
- Kihlstrom, J. F. (2023). Four problems of mind and body [Celebrating the 80th birthday of Max Velmans]. *Journal of Consciousness Studies*, 30(1-2), 87-109. doi: <https://doi.org/10.53765/20512201.30.1.087>
- Kihlstrom, J. F., & Barnhardt, T. M. (1993). The self-regulation of memory: For better and for worse, with and without hypnosis. In D. M. Wegner & J. W. Pennebaker

(Eds.), *Handbook of mental control*. (pp. 88-125). Englewood Cliffs, NJ, USA: Prentice-Hall, Inc.

- Kihlstrom, J. F., Barnhardt, T. M., & Tataryn, D. J. (1992). Implicit perception. In R. F. Bornstein & T. S. Pittman (Eds.), *Perception without awareness: Cognitive, clinical, and social perspectives*. (pp. 17-54). New York, NY, USA: The Guilford Press.
- Kihlstrom, J. F., Brenneman, H. A., Pistole, D. D., & Shor, R. E. (1985). Hypnosis as a retrieval cue in posthypnotic amnesia. *Journal of Abnormal Psychology, 94*(3), 264-271. doi: <http://dx.doi.org/10.1037/0021-843X.94.3.264>
- Kihlstrom, J. F., Dorfman, J., & Park, L. (2017). Conscious and unconscious memory. In S. Schneider & M. Velmans (Eds.), *Blackwell companion to consciousness* (2nd ed., pp. 562-575). Oxford: Wiley.
- Kihlstrom, J. F., Easton, R. D., & Shor, R. E. (1983). Spontaneous recovery of memory during posthypnotic amnesia. *International Journal of Clinical & Experimental Hypnosis, 31*(4), 309-323. doi: <http://dx.doi.org/10.1080/00207148308406625>
- Kihlstrom, J. F., & Edmonston, W. E. (1971). Alterations in Consciousness in Neutral Hypnosis: Distortions in Semantic Space. *American Journal of Clinical Hypnosis, 13*(4), 243-248. doi: <https://doi.org/10.1080/00029157.1971.10402120>
- Kihlstrom, J. F., & Evans, F. J. (1976). Recovery of Memory After Posthypnotic Amnesia. *Journal of Abnormal Psychology, 85*(6), 564-569. doi: <http://dx.doi.org/10.1037/0021-843X.85.6.564>
- Kihlstrom, J. F., & Evans, F. J. (1977). Residual effect of suggestions for posthypnotic amnesia: A reexamination. *Journal of Abnormal Psychology, 86*(4), 327-333. doi: <http://dx.doi.org/10.1037/0021-843X.86.4.327>
- Kihlstrom, J. F., & Evans, F. J. (1978). Generic recall during posthypnotic amnesia. *Bulletin of the Psychonomic Society, 12*(1), 57-60. doi: <http://dx.doi.org/10.3758/BF03329624>
- Kihlstrom, J. F., & Evans, F. J. (1979). Memory retrieval processes in posthypnotic amnesia. In J. F. Kihlstrom & F. J. Evans (Eds.), *Functional disorders of memory* (pp. 179-218). Hillsdale, N.J.: Erlbaum.
- Kihlstrom, J. F., Evans, F. J., Orne, E. C., & Orne, M. T. (1980). Attempting to breach posthypnotic amnesia. *Journal of Abnormal Psychology, 89*(5), 603-616. doi: <http://dx.doi.org/10.1037/0021-843X.89.5.603>
- Kihlstrom, J. F., & Frankel, F. H. (2000). In memoriam: Martin T. Orne, 1927-2000. *International Journal of Clinical & Experimental Hypnosis, 48*(4), 355-360.

- Kihlstrom, J. F., & Frischholz, E. J. (2010). William E. Edmonston, Jr.: Editor, 1968-1976. *American Journal of Clinical Hypnosis*, 53(2), 81-91. doi: <https://doi.org/10.1080/00029157.2010.10404330>
- Kihlstrom, J. F., Glisky, M. L., McGovern, S. R., Rapcsak, S. Z., & Mennemeier, M. (2013). Hypnosis in the right hemisphere. *Cortex*, 49(2), 393-399. doi: <https://doi.org/10.1016/j.cortex.2012.04.018>
- Kihlstrom, J. F., Glisky, M. L., Peterson, M. A., & Harvey, E. M. (1991). Vividness and control of mental imagery: A psychometric analysis. *Journal of Mental Imagery*, 15(3-4), 133-142. doi: <https://search.proquest.com/docview/618115474?accountid=14496>
- Kihlstrom, J. F., & Kihlstrom, L. C. (1998). Integrating science and practice in an environment of managed care *The science of clinical psychology: Accomplishments and future directions*. (pp. 281-293). Washington, DC, USA: American Psychological Association.
- Kihlstrom, J. F., & Kihlstrom, L. C. (1999). Self, sickness, somatization, and systems of care. In R. J. Contrada & R. D. Ashmore (Eds.), *Self, social identity, and physical health: interdisciplinary explorations* (Vol. 2). New York: Oxford University Press.
- Kihlstrom, J. F., Mulvaney, S., Tobias, B. A., & Tobis, I. P. (2000). The emotional unconscious. In E. Eich, J. F. Kihlstrom, G. H. Bower, J. P. Forgas & P. M. Niedenthal (Eds.), *Cognition and emotion* (pp. 30-86). New York: Oxford University Press.
- Kihlstrom, J. F., Peterson, M. A., Mcconkey, K. M., Cranney, J., Glisky, M. L., & Rose, P. M. (2018). Orientation and Experience in the Perception of Form: A Study with the Arizona Whale-Kangaroo. *American Journal of Psychology*, 131(2), 129-139. doi: <http://dx.doi.org/10.5406/amerjpsyc.131.2.0129>
- Kihlstrom, J. F., & Register, P. A. (1984). Optimal scoring of amnesia on the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical & Experimental Hypnosis*, 32(1), 51-57. doi: <http://dx.doi.org/10.1080/00207148408416000>
- Kihlstrom, J. F., Schacter, D. L., Cork, R. C., Hurt, C. A., & Behr, S. E. (1990). Implicit and explicit memory following surgical anesthesia. *Psychological Science*, 1(5), 303-306. doi: <http://dx.doi.org/10.1111/j.1467-9280.1990.tb00222.x>
- Kihlstrom, J. F., & Shor, R. E. (1978). Recall and recognition during posthypnotic amnesia. *International Journal of Clinical & Experimental Hypnosis*, 26(4), 330-349. doi: <http://dx.doi.org/10.1080/00207147808411257>

- Kihlstrom, J. F., & Wilson, L. (1984). Temporal organization of recall during posthypnotic amnesia. *Journal of Abnormal Psychology, 93*(2), 200-208. doi: <http://dx.doi.org/10.1037/0021-843X.93.2.200>
- Kihlstrom, J. F., & Wilson, L. (1988). Rejoinder to Spanos, Bertrand, and Perlini [re: "Reduced clustering during hypnotic amnesia for a long word list: Comment on Wilson and Kihlstrom"]. *Journal of Abnormal Psychology, 97*(3), 381-383. doi: <https://doi.org/10.1037/h0092432>
- Kirsch, I. (1994). Clinical hypnosis as a nondeceptive placebo: Empirically derived techniques. *American Journal of Clinical Hypnosis, 37*, 95-105.
- Kirsch, I. (2023). Clinical hypnosis as a nondeceptive placebo: Empirically derived techniques. *American Journal of Clinical Hypnosis, 65*(3), 246–257. doi: <https://doi.org/10.1080/00029157.2022.2119023>
- Kirsch, I., & Lynn, S. J. (1995). Altered state of hypnosis: Changes in the theoretical landscape. *American Psychologist, 50*(10), 846-858.
- Kirsch, I., & Lynn, S. J. (1997). Hypnotic involuntariness and the automaticity of everyday life. *American Journal of Clinical Hypnosis, 40*(1), 329-348.
- Kirsch, I., & Lynn, S. J. (1999). Hypnotic involuntariness and the automaticity of everyday life *Clinical hypnosis and self-regulation: Cognitive-behavioral perspectives*. (pp. 49-72). Washington, DC, US: American Psychological Association.
- Klein, S. B., & Kihlstrom, J. F. (1998). On bridging the gap between social-personality psychology and neuropsychology. *Personality & Social Psychology Review, 2*(4), 228-242. doi: https://doi.org/10.1207/s15327957pspr0204_1
- Klein, S. B., Loftus, J., & Kihlstrom, J. F. (1996). Self-knowledge of an amnesic patient: Toward a neuropsychology of personality and social psychology. *Journal of Experimental Psychology: General, 125*(3), 250-260. doi: <https://doi.org/10.1037/0096-3445.125.3.250>
- Laurence, J.-R., & Perry, C. (1988). *Hypnosis, will, and memory: A psycho-legal history*. New York: Guilford Press.
- Lynn, S. J., Laurence, J.-R., & Kirsch, I. (2015). Hypnosis, Suggestion, and Suggestibility: An Integrative Model. *American Journal of Clinical Hypnosis, 57*(3), 314-329. doi: 10.1080/00029157.2014.976783
- Lynn, S. J., & Rhue, J. W. (Eds.). (1991). *Theories of hypnosis: Current models and perspectives*. New York: Guilford.

- Macklin, R. (1968). Doing and Happening. *Review of Metaphysics*, 22(2), 246-261. doi: <https://www.jstor.org/stable/20124812>
- Marks, J. D. (1979). *The search for the "Manchurian candidate" : The CIA and mind control*. New York: Times Books.
- Mason, A. A. (1952). A case of congenital ichthyosiform erythrodermia of Brocq treated by hypnosis. . *British Medical Journal*, 2(4781), 422-423. doi: <https://doi.org/10.1136/bmj.2.4781.422>
- McGlashan, T. H., Evans, F. J., & Orne, M. T. (1969). The nature of hypnotic analgesia and placebo response to experimental pain. *Psychosomatic Medicine*, 31, 227-246.
- Miller, M. E., & Bowers, K. S. (1986). Hypnotic analgesia and stress inoculation in the reduction of pain. *Journal of Abnormal Psychology*, 95, 6-14. doi: <http://dx.doi.org/10.1037/0021-843X.95.1.6>
- Miller, M. E., & Bowers, K. S. (1993). Hypnotic analgesia: Dissociated experience or dissociated control? *Journal of Abnormal Psychology*, 102, 29-38. doi: <http://dx.doi.org/10.1037/0021-843X.102.1.29>
- Nadon, R., Kihlstrom, J. F., Hoyt, I. P., & Register, P. A. (1991). Absorption and hypnotizability: Context effects re-examined. *Journal of Personality & Social Psychology*, 60(1), 144-153. doi: <https://doi.org/10.1037/0022-3514.60.1.144>
- Nash, M. R., & Barnier, A. J. (Eds.). (2008). *Oxford Handbook of Hypnosis: Theory, Research and Practice*. Oxford, U.K.: Oxford University Press.
- Nelson, T. O. (1996). Consciousness and metacognition. *American Psychologist*, 51(2), 102-116.
- Orne, M. T. (1951). The mechanisms of hypnotic age regression: An experimental study. *Journal of Abnormal and Social Psychology*, 46, 213-225. doi: <https://doi.org/10.1037/h0059971w>
- Orne, M. T. (1959). The nature of hypnosis: Artifact and essence. *Journal of Abnormal and Social Psychology*, 58(3), 277-299. doi: <http://dx.doi.org/10.1037/h0046128>
- Orne, M. T. (1962). On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. *American Psychologist*, 17, 776-783. doi: <http://dx.doi.org/10.1037/h0043424>
- Orne, M. T. (1970). Hypnosis, Motivation, and the ecological validity of the psychological experiment. In W. J. Arnold & M. M. Page (Eds.), *Nebraska Symposium on Motivation* (pp. 187-265). Lincoln, Ne.: Univ. of Nebraska Press.

- Orne, M. T. (1972). On the simulating subject as a quasi-control group in hypnosis research: What, why, and how. In R. Fromm & R. E. Shor (Eds.), *Hypnosis: Research developments and perspectives* (pp. 399-443). Chicago: Aldine-Atherton.
- Orne, M. T. (1973). Communication by the total experimental situation: Why it is important, how it is evaluated, and its significance for the ecological validity of findings. In P. Pliner, L. Krames & T. Alloway (Eds.), *Communication and affect* (pp. 157-191). New York: Academic.
- Orne, M. T., & Evans, F. J. (1965). Social control in the psychological experiment: Antisocial behavior and hypnosis. *Journal of Personality and Social Psychology*, 1(3), 189-200. doi: <http://dx.doi.org/10.1037/h0021933>
- Orne, M. T., & Evans, F. J. (1966). Inadvertent termination of hypnosis with hypnotized and simulating subjects. *International Journal of Clinical and Experimental Hypnosis*, 14(1), 71078. doi: <http://dx.doi.org/10.1080/00207146608415895>
- Palfi, B., Parris, B. A., McLatchie, N., Kekecs, Z., & Dienes, Z. (2021). Can unconscious intentions be more effective than conscious intentions? Test of the role of metacognition in hypnotic response. *Cortex*, 135, 219-239. doi: <https://doi.org/10.1016/j.cortex.2020.11.006>
- Park, L., Shobe, K. K., & Kihlstrom, J. F. (2005). Associative and categorical relations in the associative memory illusion. *Psychological Science*, 16(10), 792-797(796). doi: <http://dx.doi.org/10.1111/j.1467-9280.2005.01616.x>
- Peters, R. S. (1958/1960). *The Concept of Motivation* (2nd ed., 1960 ed.). London: Routledge & Kegan Paul.
- Peterson, M. A., Kihlstrom, J. F., Rose, P. M., & Glisky, M. L. (1992). Mental images can be ambiguous: Reconstruals and reference-frame reversals. *Memory & Cognition*, 20(2), 107-123. doi: <http://dx.doi.org/10.3758/BF03197159>
- Platonov, K. I. (1959). *The Word as a Physiological and Therapeutic Factor: The Theory and Practice of Psychotherapy According to I. P. Pavlov* Moscow: Foreign Languages Publishing House.
- Raz, A., Kirsch, I., Pollard, J., & Nitkin-Kaner, Y. (2006). Suggestion Reduces the Stroop Effect. *Psychological Science*, 17(2), 91-95. doi: <https://doi.org/10.1111/j.1467-9280.2006.01669.x>
- Raz, A., Shapiro, T., Fan, J., & Posner, M. I. (2002). Hypnotic suggestion and the modulation of Stroop interference. *Archives of General Psychiatry*, 59(12), 1155-1161. doi: <http://dx.doi.org/10.1001/archpsyc.59.12.1155>

- Roediger, H. L. (1980). The effectiveness of four mnemonics in ordering recall. *Journal of Experimental Psychology: Human Learning & Memory*, 6(5), 558-567. doi: <https://doi.org/10.1037/0278-7393.6.5.558>
- Rosenthal, D. (2005). *Consciousness and mind*. Oxford: Oxford University Press.
- Rosenthal, R. (1963). On the social psychology of the psychological experiment: The experimenter's hypothesis as unintended determinant of experimental results. *American Scientist*, 51, 270-282.
- Sarbin, T. R. (1950). Contributions to role-taking theory: I. Hypnotic behavior. *Psychological Review*, 57, 255-270.
- Sarbin, T. R. (1954). Role theory. In G. Lindzey (Ed.), *Handbook of social psychology* (Vol. 1, pp. 223-258). Cambridge, Ma.: Addison-Wesley.
- Sarbin, T. R. (1984). Nonvolition in hypnosis: A semiotic analysis. *Psychological Record*, 34, 537-549.
- Sarbin, T. R., & Allen, V. L. (1968). Role theory. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (Vol. 1, pp. 488-567). Reading, Ma.: Addison-Wesley.
- Sarbin, T. R., & Coe, W. C. (1972). *Hypnosis: A social psychological analysis of influence communication*. New York: Holt, Rinehart, & Winston.
- Schacter, D. L., Kihlstrom, J. F., Kihlstrom, L. C., & Berren, M. B. (1989). Autobiographical memory in a case of multiple personality disorder. *Journal of Abnormal Psychology*, 98(4), 508-514. doi: <https://doi.org/10.1037/0021-843X.98.4.508>
- Scheibe, K. E., & Barrett, F. J. (2016). Sarbin's way: Overcoming mentalism and mechanism in psychology. *Theory & Psychology*, 26(4), 516-539. doi: <https://doi.org/10.1177/0959354316648019>
- Sheehan, P. W., & McConkey, K. M. (1982). *Hypnosis and experience: The exploration of phenomena and process*. Hillsdale, N.J.: Erlbaum.
- Sheehan, P. W., & Perry, C. (1976). *Methodologies of hypnosis: A critical appraisal of contemporary paradigms of hypnosis*. Hillsdale, N.J.: Erlbaum.
- Shor, R. E., & Orne, M. T. (Eds.). (1965). *The nature of hypnosis: Selected basic readings*. New York: Holt, Rinehart & Winston.

- Shor, R. E., Pistole, D. D., Easton, R. D., & Kihlstrom, J. F. (1984). Relation of predicted to actual hypnotic responsiveness, with special reference to posthypnotic amnesia. *International Journal of Clinical & Experimental Hypnosis*, 32(4), 376-387. doi: <http://dx.doi.org/10.1080/00207148408416029>
- Spanos, N. P. (1986a). Hypnosis, nonvolitional responding, and multiple personality: A social psychological perspective. In B. A. Maher & W. B. Maher (Eds.), *Progress in experimental personality research* (pp. 1-62): Academic Press.
- Spanos, N. P. (1986b). Hypnotic behavior: A social-psychological interpretation of amnesia, analgesia, and "trance logic.". *Behavioral and Brain Sciences*, 9(3), 449-467. doi: <http://dx.doi.org/10.1017/S0140525X00046537>
- Spanos, N. P. (1986c). Hypnotic behavior: A social psychological interpretation of amnesia, analgesia, and trance logic. *Behavioral and Brain Sciences*, 9, 449-467. doi: <http://dx.doi.org/10.1017/S0140525X00046537>
- Spanos, N. P., Cobb, P. C., & Gorassini, D. R. (1985). Failing to resist hypnotic test suggestions: A strategy for self-presenting as deeply hypnotized. *Psychiatry*, 48, 282-292.
- Spanos, N. P., & DeGroh, M. (1983). Structure of communication and reports of involuntariness by hypnotic and nonhypnotic subjects. *Perceptual and Motor Skills*, 57, 1179-1186.
- Spanos, N. P., James, B., & De Groot, H. P. (1990). Detection of simulated hypnotic amnesia. *Journal of Abnormal Psychology*, 99(2), 179-182. doi: <http://dx.doi.org/10.1037/0021-843X.99.2.179>
- Spanos, N. P., Jones, B., & Malfara, A. (1982). Hypnotic deafness: Now you hear it -- Now you still hear it. *Journal of Abnormal Psychology*, 91, 75-77. doi: <http://dx.doi.org/10.1037/0021-843X.91.1.75>
- Spanos, N. P., Radtke, H. L., & Dubreuil, D. L. (1982). Episodic and semantic memory in posthypnotic amnesia: A reevaluation. *Journal of Personality and Social Psychology*, 43(5), 565-573. doi: <http://dx.doi.org/10.1037/0022-3514.43.3.565>
- Spanos, N. P., Radtke, H. L., Hodgins, D. C., Stam, H. J., & Bertrand, L. D. (1983). The Carleton University Responsiveness to Suggestion Scale: Normative data and psychometric properties. *Psychological Reports*, 53(2), 523-535. doi: <http://dx.doi.org/10.2466/pr0.1983.53.2.523>
- Spanos, N. P., Robertson, L. A., Menary, E. P., & Brett, P. J. (1986). Component analysis of cognitive skill training for the enhancement of hypnotic susceptibility. *Journal of Abnormal Psychology*, 95, 350-357.

- Spanos, N. P., Stenstrom, R. J., & Johnson, J. C. (1988). Hypnosis, placebo, and suggestion in the treatment of warts. *Psychosomatic Medicine*, 50(3), 245-260. doi: <https://doi.org/10.1097/00006842-198805000-00003>
- Spanos, N. P., Williams, V., & Gwynn, M. I. (1990). Effects of hypnotic, placebo, and salicylic acid treatments on wart regression. *Psychosomatic Medicine*, 52(1), 109-114. doi: <http://dx.doi.org/10.1097/00006842-199001000-00009>
- Steen, F. H., & Estabrooks, G. H. (1928). Relation between introversion and scholastic interests. *Vocational Guidance Magazine*, 7, 38-39. doi: <https://doi.org/10.1002/j.2164-5884.1928.tb00887.x>
- Stern, J. A., Brown, M., Ulett, G. A., & Sletten, I. (1977). A comparison of hypnosis, acupuncture, morphine, valium, aspirin, and placebo in the management of experimentally induced pain. *Annals of the New York Academy of Science*, 296, 175-193.
- Tataryn, D. J., & Kihlstrom, J. F. (2017). Hypnotic tactile anesthesia: Psychophysical and signal-detection analyses. *International Journal of Clinical & Experimental Hypnosis*, 65(2), 133-161. doi: <https://search.proquest.com/docview/1881315933?accountid=14496>
- Tinterow, M. M. (Ed.). (1970). *Foundations of hypnosis: From Mesmer to Freud*. Springfield, Il.: Charles C. Thomas.
- Tobis, I. P., & Kihlstrom, J. F. (2010). Allocation of attentional resources in posthypnotic suggestion. *International Journal of Clinical & Experimental Hypnosis*, 58(4), 367-382. doi: <http://dx.doi.org/10.1080/00207144.2010.499330>
- Wagstaff, G. F. (1991). Compliance, belief, and semantics in hypnosis: A nonstate, sociocognitive perspective. In S. J. Lynn & J. W. Rhue (Eds.), *Theories of hypnosis: Current models and perspectives* (pp. 362-396). New York: Guilford.
- Wegner, D. M., Schneider, D. J., Carter, S. R., & White, T. L. (1987). Paradoxical effects of thought suppression. *Journal of Personality and Social Psychology*, 53, 5-13. doi: <http://dx.doi.org/10.1037/0022-3514.53.1.5>
- Weitzenhoffer, A. M., & Sjöberg, B. M. (1961). Suggestibility with and without "induction of hypnosis". *Journal of Nervous & Mental Disease*, 132, 204-220. doi: <https://doi.org/10.1097/00005053-196103000-00002>
- Wenk-Sormaz, H. (2006). Meditation can reduce habitual responding. *Advances in Mind-Body Medicine*, 21(3-4), 33-49.
- White, R. W. (1941). A preface to the theory of hypnotism. *Journal of Abnormal & Social Psychology*, 36, 477-505.

- Williamsen, J. A., Johnson, H. J., & Eriksen, C. W. (1965). Some characteristics of posthypnotic amnesia. *Journal of Abnormal Psychology, 70*, 123-131. doi: <http://dx.doi.org/10.1037/h0021934>
- Wilson, L., & Kihlstrom, J. F. (1986). Subjective and categorical organization of recall during posthypnotic amnesia. *Journal of Abnormal Psychology, 95*(3), 264-273. doi: <http://dx.doi.org/10.1037/0021-843X.95.3.264>
- Wood, J. M., Bootzin, R. R., Kihlstrom, J. F., & Schacter, D. L. (1992). Implicit and explicit memory for verbal information presented during sleep. *Psychological Science, 3*(4), 236-239. doi: <https://doi.org/10.1111/j.1467-9280.1992.tb00035.x>
- Young, C. W., & Estabrooks, G. H. (1937). Report on the Young-Estabrooks studiousness scale for use with the Strong Vocational Interest Blank for men. *Journal of Educational Psychology, 28*(3), 176-187.
- Young, P. C. (1925). An experimental study of mental and physical functions in the normal and hypnotic states. *American Journal of Psychology, 36*, 214-232. doi: <http://dx.doi.org/10.2307/1413859>
- Young, P. C. (1926a). An experimental study of mental and physical functions in the normal and hypnotic states: Additional results. *American Journal of Psychology, 37*, 345-356. doi: <http://dx.doi.org/10.2307/1413621>
- Young, P. C. (1926b). Hypnotism. *Psychological Bulletin, 23*(9), 504-523.
- Young, P. C. (1927). A general review of the literature of hypnotism. *Psychological Bulletin, 24*(9), 540-560. doi: <http://dx.doi.org/10.1037/h0071891>