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## **The Rhythm and the Reach of Hypnosis: Reflections on and Interactions With Selected Work of Steven Jay Lynn**

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# The Rhythm and the Reach of Hypnosis: Reflections on and Interactions With Selected Work of Steven Jay Lynn

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The phenomenon of hypnosis links to other aspects of both psychological science and the professional practice of psychology. We reflect on selected themes related to hypnosis and associated phenomena, both scientific and clinical. In doing so, we make special reference to the work of Steven Jay Lynn, a consummate scientist-practitioner, whose work and influence reflected and contributed to the rhythm and reach of hypnosis and associated phenomena over the late 20th and early 21st century.

*Keywords:* hypnosis, sociocognitive theory, dissociation, Steven Lynn

It is a truism that we are products of our time and place; some of us will also influence others in our time and place. Steven Jay Lynn, a consummate scientist-practitioner, embodied both of these essentially human aspects of product and influencer. In on Steve's death in March 2024 (Lynn et al., 2012; Sutcliffe, 1961; see Green, 2024, for a detailed obituary), we were reminded of this truism and of our interactions, both professional and personal, with Steve over many years and in many ways. We set out some of those reflections on and interactions with Lynn and his work and link those with selections of our own scientific and clinical work.

We also take the opportunity to set the work of Lynn, and of ourselves, within the broader domain of psychological science and its clinical

application over the last 40–50 years. In doing so, we seek to highlight, as Steve would want us to do, the importance of ensuring that hypnosis is investigated and applied within that broad domain, that theoretical and methodological approaches and associated inferences from findings go hand-in-hand, and that psychological science and the applications flowing from it inform each other.

We begin with a comment on the academic and professional context of hypnosis and psychology that Lynn, who completed his doctoral work in clinical psychology in 1976 at Indiana University, entered as a scientist-practitioner. The second half of the 20th century saw the discipline of psychology become increasingly pluralistic in terms of the phenomena and processes of interest, the theories and methods being developed and used, and the links with other disciplines (Hilgard, 1987). It was a time when researchers were challenging the primary paradigms of psychology and creating influential areas and approaches (e.g., Neisser, 1967). It was a time when research and researchers in the United States, the United Kingdom, Canada, and Australia, in particular, were influencing the direction of the discipline, seeking to interrelate scientific investigation and clinical application, and seeking to create active links with other researchers primarily across the Western world.

In this context, contemporary science strongly entered the field of hypnosis. Of course, there had been work from the time of animal magnetism for structured investigation and interpretation of

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hypnosis within the assumptions of the time (see Gauld, 1992; McConkey & Perry, 1985, 2002), as well as the observations and conceptual framework provided by William James in his seminal *Principles of Psychology* (James, 1890; Kihlstrom & McConkey, 1990) and the pioneering early 20th century scientific work on hypnosis and suggestibility within the prevailing paradigm of psychology (Hull, 1933). However, it was the period of the 1960s and 1970s where the scientific investigation of hypnosis developed extremely rapidly across the Western world (see Fromm & Nash, 1992; Fromm & Shor, 1972, 1979; Nash & Barnier, 2008).

The influence on the field of hypnosis, and on psychology more generally, of E. R. Hilgard, T. X. Barber, M. T. Orne, and T. R. Sarbin in this period cannot be overstated. For instance, based on theoretical and technical changes in psychometrics, the development of the Stanford Hypnotic Susceptibility Scales, Forms A, B, and C (Hilgard, 1965b; Southwick et al., 1993; Weitzenhoffer & Hilgard, 1959, 1962), and the Harvard Group Scale of Hypnotic Susceptibility, Form A (Shor & Orne, 1962), provided the gold standard for the assessment and understanding of individual differences in the capacity to experience hypnosis and respond to hypnotic suggestions (Barnier & McConkey, 2004; Woody et al., 2005). At a broader conceptual, theoretical, and methodological level, Barber (1969) argued that it was appropriate to base the investigation and interpretation of hypnotic phenomena within contemporary psychological theories, rather than to invent new concepts and make different assumptions for hypnosis than for other forms of behavior. The appropriateness of placing hypnosis within contemporary psychology was consistent also with role theory, and Sarbin argued that hypnotized individuals were implicitly and explicitly acting out a social role as they understood it generally and as it was being conveyed by the hypnotist in the specific context in which it was occurring (Sarbin & Coe, 1972). In a quite different way, Orne also situated the investigation and understanding of hypnosis within psychological research through the development of the real-simulating model of hypnosis (Orne, 1959) and its association with his pioneering work on demand characteristics within all psychological research (Orne, 1962).

We provide this summary (for detailed views of and from that time of hypnosis, see Hilgard, 1965a, 1973, 1975; Kihlstrom, 1985; M. T. Orne, 1979;

Kirsch & Lynn, 1995; Sheehan & Perry, 1976) to situate the comments we make in this article. The points made in this brief summary of mostly U.S.-based work in psychology and hypnosis were all influences on the work of Steven Jay Lynn, and they can also be seen in the geographically closer influences on us in Australia through the work of Sutcliffe (1960, 1961) and Hammer (1961) and the subsequent works of Sheehan and Perry (1976).

This was the domain of psychology and the field of hypnosis of the second half of the 20th century into which Lynn entered with his work on hypnosis and related phenomena such as fantasy proneness (e.g., Lynn & Rhue, 1988) and anomalous experience (e.g., Cardeña et al., 2000). Of course, Lynn not only continued with but also expanded on that work with expansive enthusiasm and multiple connections and collaborations across the world for the remainder of his life. Looking across his work in its totality, three themes become apparent.

The first theme is the appeal to place the investigation of hypnosis or its instrumental use to investigate other phenomena within the context of psychological theory and method more generally. The second theme is the commitment to convergence between the laboratory and the real world in terms of the understanding and application of hypnosis. The third theme, and perhaps the most difficult, is to understand and to reconcile when different theoretical frameworks and their associated methodologies lead to different empirical findings and conceptual inferences about hypnosis and associated phenomena.

These themes, which we see also in our work, came to mind as we were reflecting on the factors that shaped the prodigious laboratory and clinical work of Lynn and on how his work influenced the field and interacted with the work of others. Setting aside our direct work with him (e.g., Lynn & McConkey, 1998), we have worked on hypnosis and related phenomena that intersected with Lynn's work across the themes of domesticating hypnosis research within psychology, bidirectionally influencing experimental and clinical work, and understanding convergences and divergences of theoretical interpretations of hypnosis and related phenomena.

We turn now to highlight those themes through a summary analysis of a selection of our experimental and clinical work, together with a selection of related work by Steve and his colleagues. We then turn to make concluding comments about the

themes, about the state of hypnosis and related areas, and about the characteristics both personal and professional of Lynn's interactions with others in the field.

### **The Understanding of Agency**

The instrumental use of hypnosis as a research tool involves catalyzing alterations in behavior in highly hypnotizable participants that can reveal properties about their underlying cognitive functioning (Halligan & Oakley, 2013). One area of such instrumental use concerns the investigation of the feeling of involuntariness, which is often seen as a feature of hypnotic responding (Bowers, 1982; Weitzenhoffer, 1974). Highly hypnotizable participants often describe their sense and their actions during hypnosis as occurring without volition and with a sense of passive automaticity (Bowers, 1982; Woody & McConkey, 2003). Across his research, Lynn explored hypnotic involuntariness in a systematic way, tracking participants' experiences of self-generated actions in response to different forms of hypnotic and hypnotic-like interventions.

Lynn's views on the nature of involuntary responding in hypnosis evolved over time as more information was revealed and as his theoretical position was reshaped (James, 1890). In an early experiment, Lynn et al. (1983) contrasted feelings of involuntariness in highly hypnotizable participants who received a normal hypnotic induction, highly hypnotizable participants who received no induction and were told that the experiment was about imaginative processes, and low hypnotizable participants who were instructed to act as if they were hypnotized. Lynn et al. found that participants' behaviors and subjective reports of involuntariness varied across these conditions, with those highs who received an induction making the most involuntary movements and describing their actions as nonvolitional. Lynn et al. interpreted these findings as supportive of both neo-dissociative and role enactment views of hypnotic responding, despite the seeming incompatibility of these two views.

Over time, however, Lynn came to reduce his view of hypnotic phenomena as involving dissociation and instead argued that despite participants' subjective reports of feelings of nonvolition, responses in hypnosis were best understood as goal directed and purposeful actions that can be explained by sociocognitive

processes (Lynn & Sherman, 2000). According to this, view participants' perceptions of involuntariness are motivated by their desires to have the experiences called for by hypnotic suggestions and to act in accord with the social context and the perceived wishes of the hypnotist (Lynn et al., 1990). Kirsch and Lynn (1997) expanded on this approach by analyzing involuntariness associated with everyday actions that occur outside of hypnosis. They argued that many everyday actions are complex intentional behaviors but that they nevertheless involve aspects of automaticity. Accordingly, rather than conceptualize hypnotic responses as atypically involuntary, Kirsch and Lynn proposed that actions performed in hypnosis can be understood in essentially the same way as any other complex actions. In particular, actions both inside and outside of hypnosis are experienced as nonvolitional when they occur as responses to situational cues, even though these actions are best understood as deliberate and purposeful.

In later work, Lynn sought to integrate the sociocognitive account of involuntary action with other theoretical perspectives of hypnosis and of action more generally. For example, Lynn and Green (2011) argued that the sociocognitive account of automaticity could be reconciled with dissociative views of hypnotic responding. In particular, they argued that participants in hypnosis perceived their responses as involuntary due to both the automatic way in which actions follow from situational cues as well as to social beliefs and expectations about the nature of hypnotic responding. In doing so, Lynn attempted to explain the multifaceted nature of hypnotic responding, including the processes involved in clinical applications of hypnotic suggestion. A salient example of this translation of Lynn's response set theory to clinical work was his explanation of the seminal therapeutic techniques of Milton Erickson. Lynn noted that Erickson explicitly acknowledged that hypnotized patients respond to suggestions because of automatic responses that are shaped by response sets and expectancies occurring in the clinical context (Erickson et al., 1976). Lynn and Sherman (2000) quoted Erickson's recognition that "much initial effort in every trance induction is to evoke a set or framework of associations that will facilitate the work that is to be accomplished" (Erickson et al., 1976, p. 58). This approach resulted in Erickson developing a range of clinical

techniques, such as priming, that establish response sets that subsequently influence the hypnotic response (Erickson & Rossi, 1976, 1977).

Across this work by Lynn and his colleagues, we can see three features of high-quality instrumental hypnosis research. First, the researchers engaged in careful experimental work to measure the phenomenon of interest in hypnosis. Second, they used knowledge gained from these experiments to better characterize aspects of psychological functioning outside of hypnosis. Third, they built on these findings to progress understanding in terms of finding the convergences and divergences across seemingly disparate theoretical perspective.

Consistent with these features, we have also sought to understand the phenomenon of action generation in hypnosis. We have framed this as an exploration of “sense of agency” and have approached this problem with a different set of orienting questions. Whereas Lynn largely saw involuntariness as a monolithic construct and sought to understand the conditions that enabled and moderated this feeling, we have focused more directly on the phenomenology of involuntariness and have aimed to explore what hypnosis can reveal about action monitoring more generally.

One way we have done this is through developing a psychometric scale to track and quantify experiences of alteration to the sense of agency—the Sense of Agency Rating Scale (SOARS; Polito et al., 2013). The SOARS was constructed from a review of theoretical and experimental accounts of the sense of agency both inside and outside of the field of hypnosis. This scale showed that the phenomenology of agency alteration in hypnosis comprised two components: Involuntariness and Effortlessness. The Involuntariness subscale was characterized by changes in attributions of personal influence over self-produced actions. The Effortlessness subscale was characterized by changes in the ease with which self-produced actions were performed and the passive experience of events as they unfolded. Experiences of Involuntariness tended to be more reflective, involving judgments about causality, whereas experiences of Effortlessness tended to be more immediate, involving feelings of absorption in the task at hand.

Experimental work in this area focused on the investigation of the contours of the experience of action in hypnosis (Sutcliffe, 1960). For example,

Polito et al. (2014) investigated how different elements of a hypnotic interaction might influence the sense of agency. Polito et al. found that participants’ sense of agency varied across items of different types, across the time course of each item, and depending on whether or not participants received a hypnotic induction. In other words, a sense of agency did not change in a uniform and consistent way but rather fluctuated over time and was influenced by a range of variables across the hypnotic experience.

We also extended our hypnosis research to better understand psychological functioning outside of hypnosis. For instance, Polito et al. (2015) explored agency disruption in a sample of patients with schizophrenia. Using the SOARS Involuntariness subscale, Polito et al. quantified the sense of agency experiences of this clinical sample and compared these with an independent sample of healthy participants in hypnosis. Patients reported agency alterations associated with a broad range of positive schizophrenia symptoms, not just those traditionally characterized as “first rank symptoms” (Mellor, 1970). Overall, the reported experience of the clinical sample was indistinguishable from the reported experience of healthy, highly hypnotizable participants during hypnosis. In other words, SOARS Involuntariness scores indicated a core phenomenology of agency change, consistent across the contexts of hypnosis and clinical symptoms.

Finally, we built on this foundational work to test and expand existing theories of a sense of agency. Polito et al. (2025) reported a hypnotic adaptation of an influential study of self tickling. In the original self-tickling task (Blakemore et al., 1999), a mechanical device was used to alter the sensory consequences of self-generated tickling actions by artificially adding a temporal delay or spatial distortion. Consistent with the predictions of the comparator account of the sense of agency (Wolpert, 1997), disruption of the sensory effects of actions led participants to experience their self-produced actions as if they were externally produced; that is, the participants did not have a sense of agency for the tickling movements they had generated. The comparator account holds that the sense of agency occurs due to bottom-up, motor system processes; specifically, an action is experienced as self-caused when a low-level prediction of the sensory effects of that action match actual sensory feedback. In our hypnotic adaptation, rather than using a

mechanical manipulation of self-produced actions, Polito et al. administered hypnotic suggestions based on clinical cases of agency alteration. The participants who received a suggestion for alien control reported significant increases in the tickliness of self-produced actions compared to baseline scores. In other words, this hypnotic suggestion created agency alterations similar to the bottom-up influences on the sense of agency reported in the original tickling task.

In another experiment, we developed a hypnotic version of Wegner et al.'s (2003) *Clever Hands* behavioral illusion. In the original *Clever Hands* task, participants responded to a mix of very easy and very difficult quiz questions. Participants were instructed to answer all questions randomly but, despite this instruction, actually answered most easy questions correctly. Wegner et al. argued that answering easy questions correctly in this task was an automatic process that participants were unable to inhibit; that is, their knowledge of the answers automatically activated correct responses. Consistent with the predictions of the inferential account of sense of agency (Wegner & Wheatley, 1999), the instruction to respond randomly led participants to experience their self-produced actions (correct quiz answers) as if they were caused by chance; that is, the participants did not have a sense of agency for the correct answers they had generated. The inferential account holds that the sense of agency occurs due to top-down, attributional processes; specifically, that an action is experienced as self-caused when it is immediately preceded by a thought that is consistent with the action and the exclusive possible cause of that action. In Polito et al. (2018), rather than providing an instruction to respond randomly, we again administered participants hypnotic suggestions based on clinical cases of agency alteration. Although these suggestions had a minor impact on the sense of agency (most notably a suggestion for thought insertion led participants to experience a greater sense of agency for self-produced actions), the suggestions had a significant effect on the participants' capacity to inhibit correct answers. Specifically, the participants who received a suggestion for alien control provided genuinely random responses. In other words, these hypnotic suggestions influenced both the sense of agency and the actual agency.

The two behavioral illusions just described were motivated by different theoretical perspectives.

The tickling task was based on the comparator account, which explains agency alteration in terms of bottom-up motor system processes. The *Clever Hands* task was based on the inferential account, which explains agency alteration in terms of top-down attributional evaluations. We found that both of these agency signals (viz., motor system comparisons and attributional evaluations) influenced participants' experiences of self-produced actions in our hypnotic adaptations. The findings from our studies indicate that a complete theory of sense of agency will need to take the form of an integrative account that recognizes the contribution of a range of agency signals. We note that this theoretical need and direction became clear because, as with the approach of Lynn and the themes that we have highlighted, our research situated the instrumental use of hypnosis within psychology broadly, approached the exploration of agency from both laboratory and clinical perspectives, and sought to look for and test the agreements and disagreements across different, competing theoretical approaches to agency.

### **The Understanding of Experience and Dissociation**

One key feature of Lynn's work was the bidirectional interface of his laboratory and clinical research. Much of his laboratory-based research addressed alterations of experience and dissociation, and these are key issues in clinical work. This synergy resulted in numerous studies that made significant advances in how dissociation, consciousness, so-called repressed memories, and the role of traumatic experiences were understood in a range of clinical settings.

Lynn began this research in the context of a fierce debate about the role of dissociation in clinical disorders. A prevailing school of thought at the time was the "trauma dissociation" perspective, which posited that dissociative experiences are indicative of early life traumatic experiences. This view, which can trace its historical roots back over 100 years to Charcot (1889), proposed that people react to the aversive emotional experiences of trauma by dissociating from normal awareness. At a clinical level, this dissociative response can be manifested as derealization, depersonalization, and in extreme cases dissociative identity disorder in which



a person believes that there are distinct “personalities.”

In contrast to this perspective, Lynn and others emphasized the sociocognitive model, which holds that dissociative experiences can be shaped by social, cognitive, and cultural factors, including suggestibility, fantasy proneness, exposure to media, and therapeutic influences (Lynn, Green, et al., 2019; Lynn, Polizzi, et al., 2022). For example, Lynn, Polizzi, et al. (2022) argued that stereotypes from films and books could influence how people adopted a multiple personality persona, and the extent to which people may be susceptible to these influences could be moderated by individual differences in suggestibility and fantasy proneness. Lynn’s work also focused on other biological and cognitive factors that may impact dissociative experiences. He highlighted that some processes such as sleep disturbance and shifts in attentional focus can play a key role in dissociative experiences in both clinical and healthy populations. Lynn drew on research that disturbances in sleep are associated with dissociative experiences (Koffel & Watson, 2009) to argue that sleep difficulties are a common factor that may not be related to trauma but can contribute to dissociation in waking hours. He also emphasized that sleep disturbance can promote a predisposition to engage in fantasy, highly associable thought processes, and impairments in executive control and with all of these factors potentially contributing to dissociative experiences. Lynn’s approach sought to avoid the polarized position of this debate insofar as it did not repudiate the genuineness of dissociative experiences but rather challenged the status quo regarding the etiology of these experiences. That is, Lynn argued that dissociation is the result of multifaceted processes that can be related to trauma, can be fully independent of trauma, and can also be indirectly related to trauma through mechanisms that are not a function of defensive motivations (Lynn, Maxwell, et al., 2019).

One of the challenges for understanding the etiology of dissociative experiences in clinical contexts is it can be difficult to conclude a causal link between potential factors and subsequent dissociative response. In this context, experimental hypnosis has been useful because hypnosis allows researchers to elicit dissociative experiences and thereby to manipulate a range of factors within the laboratory setting. Not only does the use of experimental hypnosis allow manipulation of

factors under controlled conditions, but the study of healthy participants allows the delineation of dissociation from psychopathological processes that often coexist in clinical cases of dissociation (Bell et al., 2011; McConkey, 2001). This has been particularly useful in understanding psychopathological conditions involving conversion disorders and even allowed investigation of potential neurobiological underpinnings of dissociative states (Oakley & Halligan, 2013). In a series of experiments, we have recognized the value of explaining hypnotic and dissociative responses in terms of both cognitive and social processes and in this sense acknowledged both the neo-dissociation and sociocognitive models of hypnosis and dissociative experiences (Sheehan & McConkey, 1982).

Exemplifying this approach has been our use of two laboratory paradigms that have been able to demonstrate the role of cognitive and contextual factors implicated in hypnotic response. The Experiential Analysis Technique was developed as a means of indexing the subjective experiences of participants responding to hypnotic suggestions (Sheehan & McConkey, 1982). This methodology involves videorecording participants during hypnosis and after hypnosis interviewing those participants as they watch the recorded session as a mnemonic device to prompt reflection of the subjective experiences. In terms of indexing social influences, the real-simulating paradigm compares responses of “real” hypnotized participants with “simulating” nonhypnotized participants who are instructed to behave as they believe that actual hypnotized people would. In this paradigm, an independent experimenter instructs the simulating participant to use whatever information they can glean from the hypnotist and the experimental setting, and then a second experimenter who is unaware of the participant’s real or simulating identity conducts the hypnosis session (Orne, 1959, 1979). The rationale of this paradigm is that if real and simulating participants perform similarly, then demand characteristics and social influences cannot be ruled out as a potential explanation of the hypnotized participants’ responses (Sheehan & Perry, 1976).

Exemplifying how these paradigms can identify the cognitive and social processes in hypnotic phenomena, one study on hypnotically induced blindness demonstrated that even though both reals and simulators reported blindness, real

hypnotized participants behaved on a behavioral task in a way that indicated they were visually processing information more than simulators (Bryant & McConkey, 1989a). At an experiential level, through the Experiential Analysis Technique, there was a marked difference in how reals and simulators reported their responses to the suggestion for blindness. Specifically, whereas simulators described responding to the suggestion in a passive manner but nonetheless reportedly experiencing blindness, reals reported adopting an active problem-solving strategy in which they needed to effortfully employ a range of cognitive strategies to achieve the belief that they could not see. This observation was clarified in further experimental studies in which participants were instructed to use an active constructive or a passive concentrative cognitive style. Whereas simulators reported complete blindness regardless of the type of cognitive style, reals instructed to use a constructive style achieved more complete blindness than those adopting a concentrative style (Bryant & McConkey, 1990). These findings highlight the utility of experimental hypnosis to understand dissociative processes because they shed light on the cognitive and social mechanisms that can result in alterations in consciousness. As Lynn noted, disorders such as dissociative identity disorder are a dysfunction in belief about oneself rather than split personalities (Lynn, Polizzi, et al., 2022). Similarly, experimental studies in hypnosis have pointed to the importance of participants temporarily constructing beliefs that are concordant with the hypnotic suggestion they are being asked to experience.

Underscoring the utility of hypnotic experimentation to understanding clinical dissociation, one study used the same behavioral measure used in the aforementioned examination of hypnotic blindness (Bryant & McConkey, 1989a) with a patient with visual conversion disorder (i.e., dissociative blindness) and found that this patient responded on this task as though he was visually processing information while reporting phenomenal blindness (Bryant & McConkey, 1989b). Importantly, this case study found that the patient's behavioral responses were influenced by social manipulations, despite an ongoing belief in his blindness. This pattern provides compelling evidence of the recognition that people can maintain a belief in an anomalous experience but at the same time be influenced by contextual forces that impacts on how they respond.

Lynn's questioning of the trauma–dissociation model occurred at a time when there was strong support in clinical circles for this perspective. At the time, there was much debate about repressed memories, multiple personalities, and the purported role of dissociation in traumatic stress responses. In the early 1990s, a new psychiatric diagnosis was even introduced to describe acute stress responses (acute stress disorder), and this was based on the pivotal role of acute dissociative responses to trauma that were purportedly etiologically important in the development of post-traumatic stress disorder. Consistent with Lynn's approach, much evidence emerged in this period that dissociation was not linked to trauma in a linear way. For example, longitudinal studies indicate that most people develop posttraumatic stress disorder without displaying the dissociative reactions described in the acute stress disorder diagnosis (Bryant, 2011). There is convergent evidence that multiple factors can contribute to dissociation and they may be related to, or independent of, traumatic experiences. One mechanism that Lynn argued can trigger dissociative responses is heightened states of arousal, which can result in derealization and depersonalization (Lynn, Green, et al., 2019). He argued that the elevated arousal after traumatic experiences can elicit derealization but that this is a function of strong arousal and the consequent impacts on attention and awareness rather than necessarily being indicative of psychopathology. Consistent with this view, dissociative reactions are commonly reported during panic attacks (Krystal et al., 1991), dissociative phenomena occur in posttraumatic stress disorder individuals when yohimbine-induced arousal is manipulated (Southwick et al., 1993), and dissociative responses can be induced in recently trauma-exposed individuals via hyperventilation (Nixon & Bryant, 2005). In an attempt to mimic very extreme arousal, one study involving novice skydivers found that their dissociative experiences were comparable to those of people who were actually trauma-exposed (Sterlini & Bryant, 2002). Further, a study of military personnel being trained to undergo extreme stressors, such as being violently interrogated, found that this level of stress resulted in very elevated levels of norepinephrine and cortisol, as well as dissociative reactions (Morgan et al., 2013). These findings highlight that dissociative experiences can occur in the wake of elevated arousal and are not necessarily indicative of psychopathology (Bryant, 2007).



Throughout the period in which Lynn conducted his research relevant to dissociation, there have been similar debates about the nature and causes of hypnosis and dissociation in the contexts of hypnosis and in trauma. Notably, the same models were applied to debates in both domains because there were competing emphases placed on cognitive/dissociative and social processes in debates about the nature of hypnosis and the construct of dissociation. It is fair to conclude that many of these issues are still not clarified. One of Lynn's contributions was that he sought to propose and to demonstrate that a multitude of factors can influence the responses observed in hypnosis and dissociation. This has resulted in a more nuanced view of these experiences that also recognized that there is much we do not know about many of the causal factors. One practical outcome of this approach was that Lynn was able to recommend key clinical applications of how hypnosis can be used in clinical applications, and in doing so he and his colleagues emphasized the roles of subjective experience, individual differences, and social processes (Lynn, Cardena, et al., 2022). In outlining the interactive influences of these different processes, Lynn emphasized that whatever can be achieved in hypnosis can also be achieved outside hypnosis (see also Hull, 1933). This position underscores what we have learned from experimental studies of hypnosis that it is the cognitive and social mechanisms that drive people's experiences and behaviors rather than simply being the subject of hypnotic induction or suggestion. Again, we note that this perspective only becomes clear because the work involving hypnosis is situated within psychology broadly, involves an understanding and cross-fertilization of both laboratory and clinical perspectives, and seeks to engage with competing theoretical approaches.

### Concluding Comments

In our reflections on and interactions with selected work of Steven Jay Lynn, we have sought to illustrate through reference to theoretical perspectives are empirically tested for convergence and divergence. None of this is easy, of course, especially when conceptual frameworks and experimental methods change (Kirsch & Lynn, 1995; Zahedi et al., 2024), when fads and fashions in hypnosis and in psychology come and go, and

when it is easier to do another experiment to support one's preferred view rather than to engage meaningfully with challenging findings and possible reinterpretations of positions.

Although, like all of us, Steve did not always get the research findings he expected or hoped for, he did engage with challenging findings, and he did reinterpret his position on various phenomena in the light of those findings. Through personal discussions with Steve over recent years, we know that he was concerned about some aspects of hypnosis and psychology, including the emergence of a multitude of "theoretical" perspectives on hypnosis rather than an attempt to integrate existing ones, the difficulty that some clinicians have in appreciating and integrating research findings into their clinical practice, and the tendency of some researchers to argue for the distinctiveness of hypnosis separate from psychology more generally. But, Steve, in his conversations with us, approached these matters with his conviction that enthusiasm and collaboration, together with a willingness to think carefully and work effectively, would ensure the positive rhythm and reach of hypnosis.

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