Are Hypnotically Induced Pseudomemories Resistant to Cross-Examination?*

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Two experiments examined the effects of hypnotic procedures in response to interrogation and cross-examination in subjects who viewed a simulated robbery. Experiment 1 found that hypnotic and nonhypnotic leading interrogations were equally likely to produce misattributions and misidentification of mug shots. Moreover, under cross-examination subjects who had been given an hypnotic interrogation and those given nonhypnotic interrogations were equally likely to disavow their earlier misattributions and misidentifications. In both hypnotic and nonhypnotic treatments high hypnotizables were more likely than low hypnotizables to misattribute characteristics during interrogation and to disavow earlier misattributions during cross-examination. In Experiment 2 high hypnotizables given a cross-examination that legitimated their earlier errors as honest mistakes and that enabled them to disavow earlier testimony without discrediting themselves (hidden observer treatment) showed the highest and most consistent rates of disavowal. A stringent cross-examination that implied that subjects had been careless or dishonest during interrogation produced the lowest rates of disavowel.

A good deal of research indicates that eyewitness testimony is often inaccurate (e.g., Loftus, 1979) and that hypnotic procedures are no more effective than nonhypnotic ones at eliciting accurate eyewitness recall (for reviews see Smith, 1983; Wagstaff, 1984). On the other hand, research findings concerning whether hypnotic procedures bias subjects to place high confidence in their inaccurate recall remain equivocal. Some studies have reported greater confidence in incorrect recall for hypnotic subjects than for controls (e.g., Sheehan & Tilden, 1983), and others have found no differences in confidence for hypnotic and control subjects (e.g., Gregg & Mingay, 1987; Mingay, 1986; Putnam, 1979).

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Closely related to the issue of confidence in inaccurate recall is the notion that suggestions given during postevent hypnotic interrogations can lead to the creation of *pseudomemories*—false memories that subjects cannot distinguish from real memories and that are believed in and treated by subjects as real memories (Orne, 1979). Some investigators (Diamond, 1980; Orne, 1979) have argued that highly hypnotizable hypnotic subjects are particularly attuned to cues provided by the hypnotist in the form of leading questions (e.g., Did you see the offender's moustache?) and other subtle suggestions. Supposedly such subjects incorporate the false information into their memories (e.g., a moustache into their image of the offender), become unable to distinguish their false memory from what they initially witnessed, and, subsequent to the hypnotic session, report and act upon their distorted memory (e.g., pick out a mug shot of a moustached suspect). One implication drawn from these ideas holds that witnesses who underwent hypnotic interrogation believe so fervently in the veridicality of their pseudomemories that their testimony cannot be shaken by cross-examination (Diamond, 1980; Orne, 1979). On the basis of such ideas some investigators (Diamond, 1980; Orne, 1979) have argued for restrictions on the legal admissibility of testimony obtained during hypnotic interrogation.

Despite such arguments, experimental evidence concerning the effects of hypnotic procedures on pseudomemory reports is sparse. Work conducted in both hypnotic contexts (Laurence & Perry, 1983; McCann & Sheehan, 1987; Spanos & McLean, 1986) and nonhypnotic contexts (Loftus, 1979) indicates that subjects provided with misleading information during postevent interview or assessment procedures frequently incorporate the misleading information into their recall. However, the little work that has directly compared the effects of hypnotic and nonhypnotic procedures on response to misleading questions has yielded conflicting results. Putnam (1979) and Zelig and Beidleman (1981) reported that hypnotic subjects were more likely than nonhypnotic subjects to be misled by leading questions, but Yuille and McEwan (1985) found no differences between hypnotic and nonhypnotic subjects in this regard. Evidence concerning the effects of hypnotic and nonhypnotic interrogations at "immunizing" subjects against cross-examination procedures is entirely lacking.

The degree of responsiveness to suggestions shown by subjects in hypnotic situations and also in some nonhypnotic situations is frequently predicted by their pretested level of hypnotizability (cf. Spanos, 1982). Moreover, although the evidence is far from consistent, numerous studies have reported that highly hypnotizable subjects are more likely than low hypnotizables to exhibit high levels of absorption in fantasy and imagery vividness (cf. Sheehan, 1979). Interrogation procedures often ask witnesses either implicitly or explicitly to form images of what they saw. Consequently, subjects' hypnotizability may well influence how subjects respond to interrogation procedures that instruct them to generate misleading images.

The present study contains two experiments that examine issues concerning pseudomemory in a forensically relevant context. The first experiment examines the effects of hypnotic procedures, leading questions, and high and low hypnotizability on the frequency of pseudomemory reports and on the maintenance of