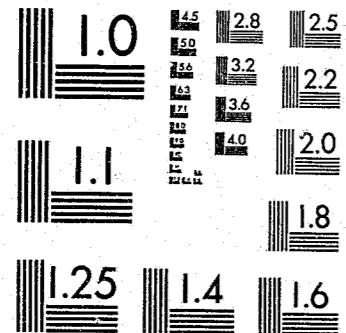


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Research in Brief

December 1984

## The Forensic Use of Hypnosis

Martin T. Orne, David F. Dinges, and Emily Carota Orne

The forensic use of hypnosis has increased sharply in the last decade, owing to its perceived usefulness as an investigative tool and to the establishment of proprietary, 4-day (or shorter) hypnosis "training" programs for police officers. In some highly publicized cases, valuable leads have emerged after hypnosis was employed.

Both prosecution and defense have used hypnosis to attempt to enhance the memory of witnesses. Since 1979, however, appellate courts in many jurisdictions have refused to admit such hypnotically elicited testimony as evidence, or have established guidelines governing its admission. Most of these judicial decisions have expressly relied

on (1) scientific evidence that casts doubt on the accuracy of hypnotically elicited testimony, and (2) the lack of acceptance by the relevant scientific community of hypnosis as a means of refreshing recall.

This brief, which is based on two extensive reviews of hypnosis research,

### From the Director

Information and evidence are vital to our process of justice. Criminal justice investigators strive to secure the most accurate and well-corroborated evidence, but they frequently find that the evidence at hand fails to meet this standard. In fact, most criminal cases are filed pending further leads.

Details given by victims and eyewitnesses can sometimes provide a critical lead that can point investigators in the right direction toward hard evidence. Eyewitness information, however, is subject to a variety of influences. Often fear or psychological trauma interfere or even block the accurate recall of the crime.

Over the past decade, police began to turn to hypnosis, in some of these cases to develop leads where none seemed to exist. Victims or witnesses were hypnotized in the hope that they could recall such information as the description of suspects or vehicle license numbers. Reports on use of the technique indicated mixed results depending on the subject and information sought.

In recent years, hypnosis has come under increasing scrutiny. Concerns about the heightened suggestibility of hypnotized witnesses and the accuracy of hypnotically-induced recall have

challenged its credibility. Some appellate courts have held that testimony refreshed through hypnosis is either not admissible or admissible only under limited conditions. However, the courts have left open the possibility that the witness may testify to matters not covered in the hypnotic session, and some courts have allowed testimony on matters recorded in statements made before the witness was hypnotized.

This Research in Brief reviews the scientific evidence on hypnosis and discusses some of the reasons for the controversy surrounding "hypnotically refreshed" testimony.

The authors of the Brief recommend that use of hypnosis be limited to investigative purposes. To assist investigative managers in setting policies for appropriate and responsible use of the technique, they suggest guidelines that can protect both the witness and the authorities.

Some professionals in the field may differ with specific points made by the authors. Certainly police and prosecutors will want to examine the suggested guidelines in light of court rulings governing their own jurisdictions.

This Brief is based on an article by Martin T. Orne, published in Volume Three of *Crime and Justice: An Annual Review of Research*. The material

in that article has been supplemented by information in an *NIJ Issues and Practices* report by Martin T. Orne, David A. Soskis, David F. Dinges, Emily Carota Orne, and Michael Tonry. The report, *Hypnotically Refreshed Testimony: Enhanced Memory or Tampering with Evidence?* will be published by the Institute.

*Crime and Justice* is supported by the National Institute of Justice. Each volume contains essays by leading scholars which deal with complex topics and provide often provocative analyses of difficult issues. The views and conclusions published in *Crime and Justice*, and summarized here, are those of the authors and do not necessarily represent the views of the National Institute of Justice.

The Institute hopes the information presented here will help clarify the issues involved. Although hypnosis may not reach the standards of veracity required for evidence, it may still hold the potential for uncovering leads when no other sources are available. Criminal justice investigators will want to be fully informed about the pros and cons of hypnosis as an investigative tool.

James K. Stewart  
Director  
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summarizes the relevant scientific knowledge on the nature of hypnosis, describes the hypnotic techniques typically employed, discusses problems presented by court admission of "hypnotically refreshed" testimony, and suggests guidelines for, and limitations of, the forensic use of hypnosis.

### The nature of hypnosis

Modern research has documented that individuals differ in their ability to respond to hypnotic suggestions, and that this difference is a relatively stable trait. Most individuals, however, are able to experience some degree of hypnosis.

Hypnosis is characterized by a subject's increased responsiveness to suggestions. By allowing the hypnotist to define what is to be experienced, the hypnotized individual forgoes evaluation both of the nature of the suggestion and his reaction to it. This increased willingness to accept suggestions in hypnosis inevitably requires that, for the time, subjects suspend critical judgment.

When hypnosis is induced, even persons with moderate susceptibility exhibit changes in their responsiveness to suggestions and in their relationship with the hypnotist. The subject's attention is intensely focused upon the hypnotist. There is an increased tendency to please the hypnotist and to comply not only with his explicit suggestions but also with subtle cues that communicate (wittingly or unwittingly) what is desired.

Subjects in the hypnotic situation feel relaxed and less responsible for what they say because they believe that the hypnotist is an expert and somehow in control. As a consequence, hypnotic suggestions can be used to alter private experience, such as memory or perception, in a manner that is uncritically accepted by the person; the hypnotized individual believes in it and is not merely acting as if he did.

### Hypnosis and the veracity of memory

There are many widely held beliefs about hypnosis that are simply not consistent with scientific evidence.

Among these are that deeply hypnotized individuals will commit acts that they will not commit in other circumstances; that they can be compelled to tell the truth in hypnosis; and that hypnosis cannot be faked.

Evidence clearly shows that, despite being very deeply hypnotized, individuals are capable of lying in hypnosis, and that hypnosis can be faked convincingly even by naive subjects who are motivated to do so.

Except in the case of defendants or some overly eager witnesses, lying in hypnosis or simulation of hypnosis, though possible, is rarely a major problem. Hypnosis may readily cause, however, a well-intentioned witness to become an "honest liar."

For example, consider an individual who is trying to remember a person whom he had seen only once at a distance of 100 yards. If, during hypnosis, he is asked to "look at" the person using hallucinated binoculars so that he can "see" him more clearly, the subject may describe the person in detail, including the pattern on his necktie, a scar on his face, and a tattoo on his arm—even though the "perception" of such detail is beyond the physical ability of the human eye at a distance of 100 yards. In other words, the subject fills in and creates in his mind's eye details that he could not possibly have seen in the past.

This process of filling-in, which is called confabulation, is very convincing to the subject. Later, he is likely to "remember" the details he reported in hypnosis as though they were his actual recollections from before hypnosis. Indeed, under these circumstances many subjects who before hypnosis clearly stated that they could not recall details of the event in question report after hypnosis that they had originally observed these details and insist that they "remembered" them all along.

The experience of having just "seen" in hypnosis what had occurred in the relatively distant past causes the individual to become considerably more confident of his memories. Further, after hypnosis a far greater number of details (not necessarily accurate) will be reported.

This aspect of hypnosis can dramatically improve the impact of an individual's testimony. Research shows that jurors are far more likely to believe witnesses who appear confident about their recollections, and who give very detailed descriptions.

Hypnosis involves the subject's suspension of critical judgment and permits him to accept what he imagines and fantasizes as "memories." Further, it gives the subject the feeling that he had "seen" in hypnosis what had actually transpired months earlier, leading to vivid, detailed, and confident testimony.

The likelihood of an individual who is not hypnotized coming to believe that he actually had seen such details is remote. In short, hypnosis can allow a person to honestly and compellingly report pseudomemories as fact—indeed more convincingly than actual recollections.

It is these consequences of hypnosis around which controversy has centered with regard to refreshing the recall of witnesses who are to testify in court.

### The legal context

The first landmark decision was *Harding v. State*, 5 Md.App. 230, 246 A.2d 302 (1968), in which the Maryland Court of Special Appeals held that refreshing memory with hypnosis was no different from referring to notes or other memoranda. A number of courts followed *Harding* over the next 10 years. There were serious shortcomings in this early decision, notably its failure to take adequate account of scientific evidence on the reliability of hypnotically refreshed recall.

Consequently, when the Minnesota Supreme Court was faced with a similar question in *State v. Mack*, 292 N.W.2d 764 (1980), it reviewed expert opinion and ruled against the admissibility of testimony from a witness whose memory had been refreshed by hypnosis.

Since *Mack*, appellate courts in many jurisdictions, including Arizona, Nebraska, Pennsylvania, Michigan, California, Indiana, Maryland, Massachusetts, and New York, have taken

similar stands. Fifteen years after *Harding* the Maryland Court of Special Appeals in *State v. Collins*, 296 Md.670 (1983), reversed its earlier position, concluding:

"[T]he use of hypnosis to restore or refresh the memory of a witness is not accepted as reliable by the relevant scientific community and . . . is, therefore, inadmissible."

The courts have differed as to whether testimony from a witness who has been hypnotized is totally inadmissible, whether it is appropriate to admit recollections obtained prior to hypnosis but not those following hypnosis, whether hypnotized witnesses may testify if special guidelines were followed when hypnosis was used, or whether (in line with the original *Harding* decision) testimony by previously hypnotized witnesses is admissible and the problems associated with hypnosis go to the weight of the evidence.

### Scientific evidence on hypnotically "refreshed" memory

If the fact that a witness has been hypnotized is to go to the weight of the evidence, then it becomes necessary that jurors understand the scientific data relevant to hypnotically "refreshed" memory.

**Hypnotic age regression.** The use of hypnosis to reexperience forgotten traumatic events has a long history in psychotherapy. Hypnotized subjects are instructed to relive events that occurred some time ago to help them deal with psychological traumas.

Typically, the age-regressed patient behaves in a manner that is appropriate to the age at which the traumatic event supposedly occurred. He may show intense feelings and describe details of the to-be-remembered event that are of a kind that could only be known by someone who had actually experienced the trauma. Upon awakening from hypnosis, the patient may show relief from the symptoms that were presumably related to the traumatic event. This phenomenon is compelling to the observer and is often accepted at face value as proof that the individual is able, while in hypnosis, not only to reexperience events but also to accurately

report the details that took place years or months earlier.

Scientific studies that have systematically assessed the accuracy of recall have not found evidence that memories reported by hypnotically age-regressed subjects are accurate. The quality of memory reports obtained in hypnotic age regression are quite similar to those obtained from hypnotic age progression, where the hypnotist suggests to the subject that it is some time in the future (e.g., the year 2085), and asks the subject to describe what he "sees."

While reports in age progression may also include strong feelings and extensive details, making the phenomenon convincing to an observer, they cannot, of course, involve memories. Instead they reflect the subject's believed-in fantasies about the future—just as age regression involves not only recollections but also believed-in fantasies about the past.

**Hypnotic "television technique."** The most widely used hypnotic techniques for "refreshing" memory involve suggestions that the hypnotized individual remember a specific event. The procedure most frequently used with victims and witnesses is the "television technique." Prior to hypnosis it is explained to the subject that everything a person experiences (sees, hears, feels, etc.) is recorded in the subconscious and can be accurately retrieved in hypnosis. After the subject is hypnotized he is told to see a television screen in his mind and that he will "see" a documentary film of the incident in question.

Like a televised football game, he is told that he will be able to stop the motion, go fast forward or backward, and zoom in to "see" details that would otherwise not be clear. Similarly, if he cannot hear he need only turn up the volume to amplify a whisper.

Telling people in hypnosis that they are "watching a documentary" is a powerful suggestion that what they see and report is what actually happened. Given the increased suggestibility in hypnosis, the suggestion to watch a documentary puts pressure on the subject to report additional

helpful details and to believe that they had actually occurred.

The television technique is not merely presented to the subject as a metaphor, but rather represents a belief about how memory is organized. By assuming that everything is recorded in memory at all times and that hypnosis allows access to these memories, proponents of this technique argue that hypnosis is logically no different from refreshing memory by the use of pictures or notes made at the time of the event. The belief that memory is a process analogous to a multi-channel videotape recorder inside the head is, however, not consistent with either the vast amount of research on human memory or current theories of memory.

**Research on hypnotic memory.** A tape recorder theory of memory, which asserts that hypnosis can retrieve memories not otherwise available, would also have to predict that hypnosis increases memory even of meaningless material. Yet research has thoroughly documented that hypnosis does *not* increase recall memory for meaningless material.

Another well-established scientific finding is that hypnosis does not increase the accuracy of recognizing pictures of objects or faces previously observed. Thus, there is no scientific basis for the use of hypnosis to accurately enhance facial recognition in a lineup.

The bulk of the research studies on hypnotically "refreshed" memories involves telling the hypnotized individual that he or she will be able to remember crucial details of a witnessed event. The central question is whether hypnosis can indeed improve memory beyond what is possible without its use. A number of studies have found that individuals recall more correct information when hypnotized than when not hypnotized. This observation has been misinterpreted, however, by ignoring other crucial aspects of the data.

In a classic study, for example, subjects were asked to remember lines of poetry that they had learned years earlier. When hypnotized, a subject recalled the second stanza of Longfel-

low's *A Village Blacksmith* as follows:

*The smithy whistles at his forge  
As he shapes the iron band;  
The smith is very happy  
As he owes not any man*

The actual second stanza is as follows:

*His hair is crisp, and black, and long,  
His face is like the tan;  
His brow is wet with honest sweat,  
He earns what e'er he can,  
And looks the whole world in the face,  
For he owes not any man.*

Although the subject's last line is nearly correct, the first three lines are not only incorrect but do not resemble any other lines in the poem. Nevertheless, without the actual poem for comparison, these three lines, confabulated in hypnosis, sound quite plausible.

What is important to recognize is that subjects were far less willing to offer such improvisations when they were not hypnotized. In other words, the standard for what a hypnotized subject considers a "memory" is lowered, making it easier for the hypnotized individual to translate hunches, beliefs, and fantasies into memories, recollections, and reported facts.

Of course, if inaccuracies are ignored and only the correct recollections are considered, as was done in the early studies, there appears to be an increase in memory when hypnosis is used. If, on the other hand, the total amount of information reported in hypnosis is taken into account, then inaccurate information is at least as likely to be increased as is accurate information—yet neither the hypnotist nor the subject can distinguish which is which.

A recent study found that subjects were very accurate in their recall prior to hypnosis, but after hypnosis the bulk of the new "memories" produced was inaccurate.

Further, scientific studies show that hypnosis increases the confidence the subject has in his recollections—regardless of whether they are accurate or inaccurate. These laboratory findings have been confirmed in an extensive field study that involved actual witnesses and victims of crimes who were hypnotized by police officers.

**Vulnerability of the hypnotized individual.** Recent research has shown that subjects in hypnosis are more vulnerable to biasing and undue suggestibility than they are without hypnosis. This results from the hypnotized subject's increased desire to please the hypnotist, his lowered critical judgment, and his increased responsiveness to suggestion.

For example, when subjects were asked leading questions about a simulated accident they witnessed earlier, they were more likely when hypnotized to incorporate erroneous information from the leading question into their memory reports.

Other subtle pressure upon the hypnotized subject to provide details will also increase pseudomemories. These pressures need not be explicit, but can be implicitly communicated through the expectations of the hypnotist, as for example occurs with the use of the television technique.

Furthermore, the very nature of the hypnotic interaction involves the hypnotist encouraging any response to suggestion by the liberal use of words like "good," "fine," "go ahead," "you're doing great." It is almost unavoidable for a hypnotist not to differentially encourage the memory reports he wants to hear. The hypnotized subject is more responsive to subtle communication of this kind.

The hypnotic procedure itself encourages visualization. What was before hypnosis only the subject's suspicion can become on an imaginary television screen a clear image of the perpetrator committing the crime. Since the hypnotist reinforces any description the subject gives, he legitimizes and validates the subject's visualization. Thus, the hypnotist's cues and encouragement can unwittingly translate a hypnotized witness's suspicion into a believable memory to which he will confidently testify.

### Conclusions from the scientific evidence

We believe that hypnosis should not be allowed to form the basis of testimony in court. The testimony of witnesses who have been hypnotized is

not more accurate than that of un-hypnotized witnesses. However, it is almost certain to have been made more convincing regardless of accuracy. Further, a very real risk exists that pseudomemories have been created in hypnosis which the witness cannot distinguish from his original recollections.

Our conclusion is supported by actual cases in which hypnotically "refreshed" memory was used. Witnesses and victims have been hypnotized and have reported new "memories" with heightened confidence, which then formed the basis of their testimony. In many of these cases evidence was later uncovered that proved definitively that the hypnotic recollections could not have been accurate.

The confident hypnotic recollections sometimes contained information that was beyond the physical limits of human perception, such as when a hypnotized witness was told to remove a robber's mask and then went on to describe the face! Unfortunately, individuals have been indicted and prosecuted on the basis of such impossible but apparently convincing identifications created in hypnosis.

### Guidelines for the investigative use of hypnosis

**Rationale.** Despite these limitations, the use of hypnosis for investigative purposes, following the guidelines set out below, offers potential benefits—for new leads—that may outweigh the risks of false information or misplaced confidence. This use can be justified, however, *only* for investigative purposes where it is recognized that the use of hypnosis may substantially decrease the reliability of the witness's memory, and *only* in cases where a suspect has not been identified to the subject, where there has not been widespread publicity involving speculations about the perpetrator, and where law enforcement officials do not have strong beliefs about what actually transpired.

Various jurisdictions have taken different approaches to dealing with the consequences of hypnotically induced recollections. Depending upon the relevant court ruling, different aspects of the guidelines may become critical.

First, in those jurisdictions where witnesses are still allowed to testify concerning the hypnotically "refreshed" recollections, compliance with the guidelines makes it possible to assess the extent of impermissible suggestiveness that may have occurred during the hypnosis session.

Second, in those jurisdictions where witnesses are not permitted to testify concerning matters about which they have been hypnotized, compliance with the guidelines is essential for the authorities to document that certain issues were *not* reviewed or touched upon during hypnosis.

Third, some jurisdictions permit witnesses or victims to testify to events that they recalled *prior* to hypnosis even if the events were discussed in hypnosis. They are not permitted, however, to testify concerning any memories that *changed* subsequent to hypnosis. Since individuals can rarely determine reliably whether a given recollection occurred before or after hypnosis, the procedures outlined in the guidelines are essential to assess what prehypnotic recollections actually were and what effects the hypnotic session is likely to have had.

**Specific guidelines.** The following guidelines are intended to provide a record of what was done and to minimize the likelihood of the misuse of hypnosis with witnesses or victims. Even if the guidelines are followed with care, they can only provide a record for assessing whether undue suggestiveness has occurred during the hypnosis session. For a detailed discussion of the rationale behind each guideline, see the more extensive reviews upon which this brief is based.

- **Qualifications of the hypnotist.** Hypnosis should be administered by a psychiatrist, psychologist, or other qualified mental health professional with experience in both clinical and forensic uses of hypnosis. The hypnotist should be impartial and ideally should know little or nothing about the case. Any information given to the hypnotist about the case should be in writing.

- **Complete videotape record.** All contact between the hypnotist and the

subject should be videotaped, from the moment they meet until they part company, with a visible clock to ensure the tape's continuity. Discussion before and after hypnosis must also be videotaped, as well as any material shown to the subject, such as photographs of suspects.

- **Other persons excluded.** Only the hypnotist and subject should be present during the interview, including its prehypnosis and post-hypnosis phases. If either the prosecution or the defense wishes to observe the session, they may do so through a one-way screen or on a television monitor. Deviations from this guideline may occasionally be necessary, such as a technician to operate the equipment, or a parent to reassure an anxious adolescent.

- **Prehypnosis procedures.** The clinician should conduct a psychological evaluation of the subject, obtain the subject's written and informed consent for hypnosis, and prior to hypnosis elicit a detailed description of the facts that the subject remembers—this is essential to establish the individual's prehypnotic recollection. The subject's expectations about hypnosis should be elicited and any serious misconceptions should be corrected.

- **Appropriate techniques.** After the induction of hypnosis and appropriate suggestions to focus on the incident in question, a free narrative report should be obtained, with the hypnotist avoiding questions or other interruptions. Neutral comments such as "go on" or "yes?" may be useful when the subject pauses. If the narrative recall fails to elicit the needed details, a more direct technique may then be employed, keeping in mind that pressure for specifics inevitably increases not only the quantity of details but also the likelihood of inaccuracies.

- **Communication with observers.** The hypnotist may leave the room at the end of the prehypnosis interview and again at the end of the narrative recall, while the videotape continues to record the subject. Observers can take advantage of the breaks to submit written requests or suggestions to the hypnotist; this material should be archived with the videotape.

- **Post-hypnosis discussion.** Since the subject is in a hypersuggestible state immediately after hypnosis, the hypnotist should avoid explicit or implicit suggestions about the subject's ability to recall matters brought up during hypnosis. Before ending the session, the hypnotist should invite the subject to discuss what he or she thinks has transpired.

Provision for clinical followup should be made if the subject requests it, or if followup appears to be indicated (as in cases in which repressed traumatic memories have been recalled). Arrangements for followup should be made with the subject before concluding the session.

### Limitations of the guidelines

The use of guidelines is intended to permit subsequent evaluation of a hypnosis session by independent experts and the trier of fact, in order to determine whether undue suggestiveness was present. Although the recommended guidelines for conducting the hypnosis session help determine what was done during the session, they do not prevent (nor is there any reliable way to prevent) subjects from confounding distorted hypnotic memories with prior and subsequent nonhypnotic recall or from placing undue confidence in these distorted recollections.

Thus, the use of the results of hypnosis applied in investigative situations, as well as the use of the procedure itself, demands extreme caution.

The review and evaluation upon which this brief is based was supported in part by grant number MH 19156 from the National Institute of Mental Health, U.S. Public Health Service, in part by grant number 82-IJ-CX-0007 from the National Institute of Justice, U.S. Department of Justice, and in part by a grant from the Institute for Experimental Psychiatry. This work was conducted at the Unit for Experimental Psychiatry, The Institute of Pennsylvania Hospital, and the Department of Psychiatry, University of Pennsylvania Medical School. We are especially grateful to David A. Soskis, Michael H. Tonry, Matthew H. Erdelyi, and Wayne G. Whitehouse for their comments and contributions to earlier versions of this brief, and to Mae C. Weglarski, Stephen R. Fairbrother, and Mary Fleming Auxier for help in researching, formatting, and preparing the manuscript.

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