

A priori considerations prejudicing successful interrogation by trance induction suggest a possible variant technique.

HYPNOSIS IN INTERROGATION

Edward F. Deshere

The control over a person's behavior ostensibly achieved in hypnosis obviously nominates it for use in the difficult process of interrogation. It is therefore surprising that nobody, as the induction of "Mesmeric trance" has moved from halls of magic into clinics and laboratories, seems to have used it in this way. A search of the professional literature shows at least that no one has chosen to discuss such a use in print, and a fairly extensive inquiry among hypnosis experts from a variety of countries has not turned up anyone who admits to familiarity with applications of the process to interrogation. There is therefore no experimental evidence that can be cited, but it should be possible to reach tentative conclusions about its effectiveness in this field on the basis of theoretical considerations.

The Nature of Hypnosis

Experimental analysis has gradually given us a better understanding of hypnosis since the days of Mesmer(6) and his followers, who held that it results from the flow of a force called animal magnetism from hypnotist to subject. Nevertheless, although no present-day investigator shares the lingering lay opinion that hypnosis is in some way an overpowering of a weak mind by a superior intellect, there are still many divergent theories propounded to account for the accumulating clinical observations. Some of these have significantly different implications with respect to the susceptibility of a hypnotized person to purposeful influence.

The view that hypnosis is a state of artificially induced sleep has been widely held since Braid(7) invented the term in mid-nineteenth century. Currently Pavlov(20) takes a similar position in maintaining that cortical inhibition, sleep, and hypnosis are essentially identical. This view is now held throughout those parts of the world where Pavlovian theory is accepted as creed, but to the American investigator the experimental evidence against it appears overwhelming. Bass,(3) for example, has shown that the patellar—kneecap—reflex, which disappears in sleep, is not diminished in hypnosis. Wells(27) and others have demonstrated that all hypnotic phenomena can be elicited in a state bearing no resemblance to sleep, a performance which suggests the hypothesis that sleep-like aspects of hypnosis are not intrinsic to the hypnotic state but result from the hypnotist's suggestion that his

subject go to sleep. Barker and Burgwin(2) have shown that the electroencephalographic changes characteristic of sleep do not occur in hypnosis except when true sleep is hypnotically induced. The findings of two Russian papers(16) which dispute this conclusion, affirming that the EEG rhythm characteristic of hypnosis resembles that of drowsiness and light sleep, have not been verified by replicating their experiments.

The concepts of suggestion and suggestibility as applied to hypnosis, introduced about 1880 by the Nancy school of hypnosis investigators, have been developed and refined in modern times. In a major monograph Hull(10) concluded that hypnosis is primarily a state of heightened suggestibility and has the characteristics of habit in that it becomes increasingly easy for a subject to enter the state of hypnosis after he has once done it. Welch,(26) in an ingenious application of the conditioning theory, pointed out that trance induction begins with suggestions which are almost certain to take effect and proceeds to more difficult ones. While the concept of suggestion does provide a bridge between the hypnotic and the normal waking state, it does not explain the peculiarity of the hypnotic process or the causes of the state of trance.

Several more recent approaches, which might be called *motivational* theories of hypnosis, hold that achievement of trance is related to the subject's desire to enter such a state. Experimentalists and clinicians who take the motivational view—including the present writer, whose conclusions on the subject of this paper are undoubtedly colored by it—believe that it accounts best for the major portion of the clinical data. Trance is commonly induced in situations where the subject is motivated a priori to cooperate with the hypnotist, usually to obtain relief from suffering, to contribute to a scientific study, or (as in a stage performance) to become a center of attraction. Almost all information currently available about hypnosis has been derived from such situations, and this fact must be kept in mind when one attempts to apply the data theoretically to situations different from these.

Hypnosis of Interrogees The question of the utility of hypnosis in the interrogation of persons unwilling to divulge the information sought involves three issues: First, can hypnosis be induced under conditions of interrogation? If so, can the subject be compelled to reveal information? , And finally, if information can be so obtained, how reliable will it be? The initial problem is then to induce trance either against the subject's wishes or without his being aware of it.

The Subject Unaware. Hypnosis has reportedly been effected without the subject's awareness in three situations—in sleep, in patients

undergoing psychiatric consultation, and spontaneously in persons observing another subject being hypnotized.

The older literature is replete with references to somnambulistic hypnosis induced by giving suggestions to sleeping subjects in a low but insistent voice. No case records are cited to support these statements, however; and they appear, like many others in hypnosis literature, to have been carried over from one textbook to another without critical evaluation. In a recent study Theodore X. Barber(1) found considerable similarity between subjects' compliance with suggestions given during sleep and their reactions to ordinary hypnotic techniques. Since Barber had asked them for permission to enter their rooms at night and talk to them in their sleep, however, it is reasonable to assume that most if not all of them perceived that trance induction was his purpose. They cannot therefore be regarded as truly naive sleeping subjects. Casual experimentation by the present writer has failed to demonstrate the feasibility of hypnotising naive sleepers. The sample consisted of only four subjects, three of whom awakened to ask belligerently what was going on. The fourth just continued to sleep.

It is frequently possible for a therapist to perform hypnosis with the patient unaware. Advising the patient to relax, suggesting that he would be more comfortable with his eyes closed, and so on, the practitioner may induce a deep level of trance in a relatively brief time without ever using the term hypnosis. Even though the subject has not explicitly consented to be hypnotized, however, his relationship to the hypnotist, here a man of reputation and prestige, is one of trust and confidence, of justifiably anticipated help.

Observers of hypnotic demonstrations may spontaneously enter trance. One of my own psychotherapy patients has reported that she went into a trance while watching me demonstrate hypnotic phenomena on television. This spontaneous hypnosis occurred despite the fact that the patient was in the company of friends and it was therefore a source of embarrassment to her. But here again we are dealing with a subject in sympathy with the purposes of the hypnotist and one who feels himself to be in a safe situation. It has been noted clinically that persons with negative attitudes about hypnosis are not susceptible to spontaneous trance.

The Subject Antagonistic. In experiments conducted by Wells,(29) Brenman,(8) and Watkins(25) subjects making an effort to resist trance induction were unable to fight it off. Space does not permit a full review of these experiments here, but in all three the subject; had had previous trance experiences with the hypnotist, which, we may assume, initiated a positive relationship between subject and hypnotist. The subject was instructed to resist hypnosis, but in the context of

participating in an experiment to test this issue. It seems possible that his response was one of compliance with a supposed implicit desire on the part of the experimenter that he collaborate in demonstrating that trance can be induced in the face of resistance. The demand characteristics of the situation—those influencing the subject to partake of the experimenter's purposes—may have been such that his prescribed attitude of overt resistance was unable to prevail over the more fundamental attitude of cooperation in an experiment to show that trance can be brought on against a subject's will.

Orne(18) has shown that the demand characteristics of an experimental situation may greatly influence a subject's hypnotic behavior. It is clear that at some level any cooperative subject wishes an experiment to "work out," wishes to help fulfill the experimenter's expectations. If he grasps the purpose of the experiment or the bias of the experimenter, he is disposed toward producing behavior which will confirm the experimenter's hypothesis. This is particularly true in a hypnotic relationship.

We are led to the conclusion that the many apparent cases of hypnosis without the subject's awareness or consent all seem to have depended upon a positive relationship between subject and hypnotist. The most favorable situation is one in which the subject expects to derive benefit from his association with the hypnotist and trusts in the hypnotist and his ability to help. This would not be the situation in an interrogation wherein the hypnotist is seeking to extract information which the subject (wants to withhold. The possibility of using hypnosis would therefore seem to depend on success in the slow process of nurturing a positive relationship with the interrogee or in perpetrating some kind of trickery.

Obedience in Trance

Assuming that an interrogator has circumvented these problems and hypnotized a subject who wants to withhold information, to what extent might the subject retain control of his secrets even in deep trance? This is an area where wide disagreements prevail among authorities and where experimental evidence is highly contradictory. Young,(30) for example, reports that subjects resist specific hypnotic suggestions if they have decided in advance to do so, while Wells(28) reports that none of his subjects were able to resist a prearranged unacceptable command or indeed any other.

Most work on this problem has focused on the more specific question of whether a person can be induced under hypnosis to commit some antisocial or self-destructive act. Supporting the negative view is the classic experiment by Janet,(11) who asked a deeply hypnotized female to commit several murders before a distinguished group of judges and

magistrates, stabbing some victims with rubber daggers and poisoning others with sugar tablets. She did all this without hesitation. As the company dispersed, however, she was left in the charge of some young assistants, who took a notion to end the experiments on a lighter note. When they told her that she was now alone and would undress she promptly awakened. The murders were play-acted, the undressing would have been real; and the subject had no difficulty discerning the difference.

Wells,(29) on the other hand, caused a subject to commit the post-hypnotic theft of a dollar bill from the hypnotist's coat. The subject was unaware of his action and denied vehemently that he had stolen the money. Wells argues that other failures to compel such acts do not disprove the possibility of doing it, whereas even one success demonstrates that it can be done. Schneck and Watkins, also, cite evidence that behavior ordinarily constituting a crime can be produced by hypnosis. Schneck(22) inadvertently caused a soldier to desert his duty in order to carry out a suggestion for post-hypnotic action. Watkins(24) induced a soldier to strike a superior officer by suggesting that the officer was a Japanese soldier, and he obtained from a hypnotized WAC some information classified "secret" which she had previously told him she would not reveal.

Although these demonstrations appear convincing, there are deficiencies in their experimental conditions. Since both Schneck and Watkins were Army officers, the offenses committed could not possibly result in any serious damage. At some level, the subjects must have been aware of this. This same reasoning applies in experiments requiring a subject to hurl acid at a research assistant or pick up a poisonous snake: the participants are protected by invisible glass, a harmless snake is substituted for the poisonous one, and so forth. The situations are clearly experimental and the hypnotist who requests the homicidal or self-destructive behavior is known to the subject as a reputable man. From real life there are a fair number of cases on record dating before 1900, particularly among the German-speaking peoples, claiming hypnotically induced criminal behavior, mostly sex offenses, it is hard to evaluate these cases scientifically at this late date; frequently it was relatives of the subject, rather than the offender himself, that charged hypnotic influence. Within recent years, however, three documented cases in which hypnosis is said to have played a role in criminal behavior have been reported—by Kroener(13), Maver(14), and Reiter(21). These three cases have a common element: in each a dissatisfied person found gratification through the individual who later became his seducing hypnotist. It will be sufficient to examine one of them.

In the case reported by Kroener a young and sensitive unmarried male schoolteacher came under the hypnotic influence of a neighbor. Beginning with neighborly hospitality, the neighbor built up the relationship to the point where he was able by hypnotic suggestion to get the schoolteacher to give or lend him small sums of money and goods. As a test of his power he then implanted the post-hypnotic suggestion that the schoolteacher would, shoot himself in the left hand. The schoolteacher actually did shoot himself in the left elbow, subjectively perceiving the event as an accident. Finally the hypnotist caused his victim to confess to crimes that he himself had committed. Throughout the entire affair, lasting five years, the schoolteacher had no recollection of the hypnotic sessions. He was convicted on the basis of his post-hypnotic confession, but through a chance remark began to suspect the nature of his relationship with his neighbor. After many appeals, he was recommended for examination to Kroener, who eventually uncovered the true course of events by re-hypnotizing him and causing him to remember the hypnotic experiences with his neighbor.

It is evident that a case like this offers little encouragement to the interrogator hoping to extract secrets by hypnosis. When the relationship between two individuals is marked by intense feelings and a strong tendency in one to comply with whatever requests are made of him by the other, it is in fact hardly necessary to invoke hypnosis to explain the resultant behavior. In the interrogation setting this emotional relationship of subject to hypnotist is not likely to exist.

Accuracy and Veracity

Supposing, however, that an interrogee has been hypnotized and induced to divulge information: how correct is this information likely to be?

Accuracy in Recall A great deal has been written, especially in the press, about the perfect memory and unflinching accuracy of recall people display in hypnosis. Statements have frequently been made about their ability to recall anything that has happened to them even while infants, and according to some even prior to birth.⁽¹²⁾ Hypnotic age-regression is 1 mechanism frequently used for this purpose. The subject is "taken back" to, say, the age of six. He begins to act, talk, and to some extent think in the manner of a six-year-old. He hallucinates the appropriate environment and gives details about people sitting next to him in school, his teacher's name, the color of the walls, and so on. His actions are exceedingly convincing, and it has frequently been assumed that an actual regression in many psychologic and physiologic age components to the suggested year takes place.

There is little evidence for the genuineness of hypnotic age-regression, even though there have been a number of studies mostly based on single cases. Young³¹ demonstrated that performance on intelligence tests was not appropriate to the suggested age. Unhypnotized control subjects

were more successful than subjects under deep hypnosis in simulating their age. Using the Rorschach test and drawings in a study on hypnotic age-regression in ten subjects, Ome(17) demonstrated that while some regressive changes appeared, non-regressive elements were also present, and changes toward regression showed no consistency from subject to subject. The drawing did not resemble the work of six-year-olds, being characterized by Karen Machover as "sophisticated oversimplification." Drawings actually done at the age of six by one subject were available for comparison, and there was not even a superficial resemblance. Subjects often gave with great conviction the name of the wrong teacher, one they had had at a later age. Studies by True and Stephenson(23), and McCranie, Crasilneck, and Teter(15) failed to find in electroencephalograms taken during hypnotic age-regression any change in the direction of a childhood EEG. Similarly they report no increased heart rate, as characteristic of infants, or other changes in electrocardiograph tracings, *Hypnotic Veracity*. Considerably less data is available on the veracity of information furnished in trance. I have been able to find in the professional literature only one author—Beigel(4, 5)—who deals with prevarication under hypnosis. He writes in a personal communication that people may lie, refuse to answer, or wake up when asked direct questions on sensitive matters. Our own clinical work has amply convinced us that hypnotized subjects are capable of lying when they have reason to do so. It is therefore possible that information obtained from an interrogee by hypnosis would be either deliberate prevarication or an unintentional confusion of fantasy and reality. The correctness of any information so obtained would thus have to be established by independent criteria.

Prophylactic Hypnosis

Three suggestions have been made by Estabrooks(9) for what might be called defensive uses of hypnosis. He proposed that it might be used to make personnel hypnosis-proof on capture by the enemy, to induce in them amnesia for sensitive material in the event of capture, or to help them resist stress, particularly pain, in captivity. As we have seen, there is little or no evidence that trance can be induced against a person's wishes. Proofing personnel against hypnosis attempts which they could successfully resist without this conditioning would seem a practice of doubtful utility. The hypnosis undertaken in order to suggest that they resist trance induction upon capture might in fact possibly precondition them to susceptibility. It might be better simply to warn them of the techniques of trance induction and inform them that they can prevent it.

Providing by hypnotic suggestion for amnesia upon capture is an intriguing idea, but here again we encounter technical problems. It is well known that the effectiveness and permanence of hypnotic suggestion is directly related to the concrete definition of a specific task. General suggestions such as blanket amnesia have unpredictable effects even on very good subjects. Moreover, even if it would work to suggest that a soldier remember only his name, rank, and serial number, there is the serious question whether this might deprive him of information vital to him during captivity. It would artificially induce a state of severe psychopathology, which if adaptive to his situation in some respects might be extremely disturbing in others. The impoverishment of his knowledge and his loss of ego-control would give his interrogator a very effective means of controlling him, possibly leading to a quasi therapeutic relationship in which the captive would turn to the interrogator for "treatment" to relieve his distress. This method has other serious drawbacks: offensive action such as attempts to escape or schemes for cooperation among prisoners to obstruct interrogation, would be severely handicapped. It could be far safer to rely on the soldier's own ego-control to decide what information ought not to be revealed to an enemy than to make this decision for him in advance by hypnotic means.

Conditioning individuals not to feel stress, particularly pain, would seem to hold promise of protecting them as captives subject to interrogation; Laboratory experiments have demonstrated that although subjects under hypnotic analgesia continue to respond physiologically much as they do in the waking state, they do not report experiencing pain. It appears that hypnosis works best in situations of high anxiety and probably has its major effect on the anxiety component of pain. Such a procedure might be undertaken in particular instances, but probably is not feasible as general practice. Only a relatively small number of individuals will enter a sufficiently deep somnambulistic state to produce profound analgesia. Furthermore, though major surgery has been performed under hypnosis proper, I am unaware that major surgical procedure has ever been undertaken during post-hypnotically induced analgesia. In some individuals, I am sure, this would be possible, but clinicians working with hypnosis generally believe that the hypnotic state itself is more effective than post-hypnotic inductions,

If this should be tried, what type of suggestion should the subject be given? The post-hypnotic suppression of *all* pain might, be dangerous to the individual, since pain serves as a physiological warning signal; and it is doubtful that such a blanket suggestion would be effective anyway. It would be better to focus the suggestion on inability to feel pain at the hands of captors. Even this suggestion, however, would rapidly break down if the captured subject felt any pain at all, as is

likely in all but a very few instances. The soldier who had been taught to rely on hypnosis as an analgesic anti found it ineffective in certain situations might be considerably worse off than if he had not trusted this device in the first place.

Pseudo-Hypnosis as Interrogation Aid

People do undergo physical and mental suffering to withhold information from an interrogator. Without attempting to discuss the psychodynamics of capture and interrogation—which obviously will vary widely from captive to captive—we would hazard the suggestion that at the core of their resistance is the sense of extreme guilt which would be activated by collaboration with the enemy while still in control of one's faculties. The alleviation of this sense of guilt, therefore, might be extremely useful to the interrogator. Both the hypnotic and the hypnoidal states induced by certain drugs are popularly viewed as ones in which a person is no longer master of his fate. This fact suggests the possibility that the *hypnotic situation*, rather than hypnosis itself, could be used to relieve a person of any sense of guilt for his behavior, giving him the notion that he is helpless to prevent his manipulation by the interrogator.

A captive's anxiety could be heightened, for example, by rumors that the interrogator possesses semi-magical techniques of extracting information. A group of collaborating captives could verify that interrogees lose all control over their actions, and so on. After such preliminary conditioning, a "trance" could be induced with drugs in a setting described by Orne(19) as the "magic room," where a number of devices would be used to convince the subject that he is responding to suggestions. For instance, a concealed diathermy machine could warm up his hand just as he receives the suggestion that his hand is growing warmer. Or it might be suggested to him that when he wakes up a cigarette will taste bitter, it having been arranged that any cigarettes available to him would indeed have a slight but noticeably bitter taste. With ingenuity a large variety of suggestions can be made to come true by means unknown to the subject. Occasionally these manipulations would probably elicit some form of trance phenomenon, but the crucial thing would be the situation, not the incidental hypnotic state. The individual could legitimately renounce responsibility for divulging information much as if he had done it in delirium.

The correctness of information so obtained, however, would be no surer than that of information obtained from hypnosis itself. Further, the interrogator would have to act in a relationship with the captive as though he were confident that it was all correct, except as he could detect falsehoods with certainty. Any doubt he betrayed would increase the subject's feeling of control and so decrease the effectiveness of the

hypnotic situation. Cross-examination, upon which much of his success in deriving accurate information ordinarily depends, would be denied him. Once the prisoner loses his feeling of responsibility for his behavior, he also is relieved of responsibility for giving accurate and pertinent information.

An effective defense against this hypnotic situation, as against hypnosis, could be provided by raising the level of sophistication of those who might be exposed to it. Even one or two lectures warning them of possible devices to trick them into believing themselves hypnotized could show them that people cannot be hypnotized against their will and cannot be compelled even under hypnosis to tell the truth or to follow suggestions really contrary to their beliefs.

Findings

In summary, it appears extremely doubtful that trance can be induced in resistant subjects. It may be possible to hypnotize a person without his being aware of it, but this would require a positive relationship between hypnotist and subject not likely to be found in the interrogation setting. Disregarding these difficulties, it is doubtful that proscribed behavior can be induced against the subject's wishes, though we must admit that crucial experiments to resolve this question have not yet been performed. The evidence also indicates that information obtained during hypnosis need not be accurate and may in fact contain untruths, despite hypnotic suggestions to the contrary. Hypnosis as a prophylaxis against interrogation, whether to prevent hypnosis by captors, to condition against stress and pain, or to create amnesia for sensitive information, would function as an artificial repressive mechanism with the serious disadvantage of diminishing the captive's mastery of the situation. Finally, the hypnotic situation, rather than hypnosis itself, seems likely to be a more effective instrument in interrogation.

BIBLIOGRAPHY

1. Barber, T. X. Hypnosis as perceptual-cognitive restructuring: in From somnambulism to autohypnosis. *J. Psychol.*, 1957, 44, 299-304.
2. Barker, W., and Burgwin, S. Brain wave patterns accompanying changes in sleep and wakefulness during hypnosis. *Psychosom. Med.*, 1948, 10, 317-326..
3. Bass, M. J. Differentiation of hypnotic trance from normal sleep. *Exper. Psychol.*, 1931, 14, 382-399.
4. Beigel, H. C. Prevarication under hypnosis. *J. clin. exp. Hypnosis*, 1933, 1, 32-40.
5. Beigel, H. C. The problem of prevarication in marriage counseling. *Marriage and Family Living*, 1953, 15, 332-337.

6. Boring, E. G. *A history of experimental psychology*. New York: Appleton-Century-Crofts, Inc., 1950.
7. Braid, J. *Neurohypnology*. London: George Redway, 1899.
8. Bren man, M. Experiments in the hypnotic production of anti-] social and self-injurious behavior. *Psychiatry*, 1942, 5, 49-61. !
9. Estabrooks, G. H. *Hypnotism*. New York: E. P. Dutton & Co., 1 Inc., 1943.
10. Hull, C. *Hypnosis and suggestibility*. New York: Appleton-Century-Crofts, 1933.
11. Janet, P. *Psychological healing, a historical and clinical study*. London: George Allen & Unwin, 1925.
12. Kline, M. V. *A scientific report on "the search for Bridey Murphy."* New York: Julian Press, 1956.
13. Kroener, J. *Hypnotism and crime*. Trans. J. Cohen. Wiltshire, Hollywood, 1957.
14. Mayer, L. *Dos verbrechen in hypnose*. Miinchen: J. P. Lehman, 1937.
15. McCranie, E. J., Crasilneck, H. B., and Teter, H. R. The EEG in hypnotic age regression. *Psychiat. Quart.*, 1955, 29, 85-88.
16. Nevsky, M. P. Bioelectrical activity of the brain in hypnotic sleep. *Neuropatologia: psikhiaatriia*, 1954, 54, 26-32.
17. Orne, M. T. The mechanisms of hypnotic age regression: an experimental study. */: abnorm. soc. Psychol.*, 1951,46, 213-225.
18. Orne, M. T. The nature of hypnosis: artifact and essence. *J. : abnorm. soc. Psychol.*, 1959, 58, 277-299.
19. Orne, M. T. Hypnotically induced hallucinations. A. A. A. S. symposium on hallucinations, December, 1958, In press.
20. Pavlov, I. P. The Identity of inhibition with sleep and hypnosis. *Science Monthly*, 1923,17, 603-608.
21. Reiter, P. J. *Antisocial or criminal acts and hypnosis: a cast study*. Springfield, HL: Charles C. Thomas, 1958.
22. Schneck, J. M. A military offense induced by hypnosis. *J. Nen ment. Dis.*, 1947, 106, 186-189.
23. True, R. M., and Stephenson, C. W. Controlled experiments correlating electroencephalogram, pulse, and plantar reflexes with hypnotic age regression and induced emotional states. *Personality*, 1951,1, 252-263.
24. Watkins, J. O. Antisocial compulsions Induced under hypnotic trance. *J. abnorm. soc. Psychol.*, 1947, 42, 256-259.
25. Watkins, J. G. A case of hypnotic trance Induced in a resistant subject in spite of active opposition. *Brit. J. Med. Hypnotism* 1941, 2, 26-31.
26. Welch, L. A behavioristic explanation of the mechanism of suggestion and hypnosis. *J. abnorm. soc. Psychol.*, 1947, 42, 359-364
27. Wells, W. R. Experiments In "waking hypnosis" for instructional purposes. *J. abnorm. soc. Psychol.*, 1923, 18, 239-404.

28. Wells, W. R. Ability to resist artificially Induced dissociation. *J abnorm. Psychol*, 1940, 35, 261-272.
29. Wells, W. R. Experiments in the hypnotic production of crime *J. Psychol*, 1641,11,63-102.
30. Young, P. C. Is rapport an essential characteristic of hypnosis *J. abnorm. soc. Psychol*, 1927, 22, 130-139.
31. Young, P. C. Hypnotic regression—fact or artifact? *J. abnorm soc. Psychol*, 1940, 35, 273-278.