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SPONTANEOUS RECOVERY OF MEMORY DURING POSTHYPNOTIC AMNESIA¹

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Abstract: Repeated testing of posthypnotic amnesia indicates that some Ss, initially responsive to the suggestion, show appreciable recovery of memory before the pre-arranged signal is given to cancel the amnesia. Comparison of Ss who received 2 successive memory tests during amnesia with others who received only a single test preceded by a distracting activity indicated that the recovery effect was attributable to the passage of time rather than to prior testing. There were wide individual differences in the extent of recovery, with some Ss maintaining a fairly dense amnesia on the second test. Those Ss who maintained amnesia were more hypnotizable, and showed a denser initial amnesia, than those who breached it. An analysis of subjective reports lent credence to the notion of partial response among some hypnotizable Ss who fail to meet a standard criterion of complete amnesia, and pseudoamnesia among some unsusceptible Ss who appear to pass it. Some Ss reported voluntarily engaging in cognitive activity designed to induce forgetting, but these reports were related to neither the occurrence of initial amnesia nor its persistence. A failure of memory which reflects momentary disorientation upon transition from one mental state to another should be conceptually distinguished from a reversible amnesia initiated by hypnotic suggestion.

In conventional practice, suggestions for posthypnotic amnesia consist of two components: the suggestion that the subject will have difficulty,

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upon awakening, in remembering the events and experiences that transpired while he or she was hypnotized; and the establishment of a signal by which the amnesia suggestion may be cancelled and the memory restored. Despite the explicit inclusion of a reversibility cue in conventional suggestions of amnesia, initially amnesic subjects may show some degree of recovery of memory before the signal is given.

In a recent study by Kihlstrom, Evans, E.C. Orne, and M.T. Orne (1980), for example, hypnotized Ss received a standard suggestion for amnesia followed by two successive recall tests before administration of the reversibility cue. Four types of special instructions concerning the manner of recall (demands for honesty, extra effort, and strategic organization, as well as a simple retest) were interpolated between the two amnesia tests. These special instructions had no observable differential impact on the recall of moderately or highly hypnotizable Ss who met a criterion for initial posthypnotic amnesia. In each of the four treatment conditions, however, these same Ss showed a significant overall improvement in memory on the second amnesia test, compared to their previous performance. This improvement was not typically large enough to abolish the initial amnesia entirely, and many Ss maintained a fairly complete amnesia across both tests. Interestingly, there were no differences in general hypnotizability between those Ss who maintained amnesia and those who breached it.

As Kihlstrom et al. (1980) noted, their failure to find any effect of changing instructional demands on posthypnotic amnesia is problematic, as it amounts to accepting the null hypothesis. Perhaps more powerful demands would have had a discernible effect on these Ss. Failing that, perhaps some individual-difference variable would predict which Ss would breach amnesia and which would not. A series of studies by Coe and his colleagues has addressed both points. Howard and Coe (1980) employed Ss who had proved to be both highly hypnotizable and amnesic on an initial screening session. In a second session, posthypnotic amnesia was tested in one of three contexts: while Ss were relaxed, after receiving an honesty demand, and after being attached to a "lie detector." The two experimental conditions did lead to an increase in recall compared to control Ss, but only for those Ss who reported that their remembering was under voluntary control. Those Ss who reported that they had no control over remembering the material showed no effect of the manipulation. This differential effect was replicated by Schuyler and Coe (1981), comparing only the "lie detector" and relaxation conditions. Apparently, individual differences in perceived involuntariness of response successfully predict who will respond to contextual changes by breaching their amnesia. This very reasonable solution is clouded somewhat, however,

by a recent study by Ham, Radtke, and Spanos⁵. They replicated Kihlstrom et al. (1980) in finding no overall effect of an honesty demand compared to a retest control, but they failed to replicate the findings of Coe and his colleagues (Howard & Coe, 1980; Schuyler & Coe, 1981) with respect to the importance of perceived involuntariness.

In the study of Kihlstrom et al. (1980), a significant improvement over the initial memory test was observed even in those hypnotizable, amnesic Ss who received a simple retest, without any change in instructional demands. Whatever the effects of contextual shifts may prove to be, this apparently spontaneous recovery of memory is of some interest because it suggests that posthypnotic amnesia may be somewhat fragile and transitory. From a theoretical point of view, the spontaneous recovery from amnesia observed in these Ss may be a function of two processes: a remission or decay of amnesia due to the passage of time, or a reminiscence effect stemming from the successful retrieval of some memories on the initial test of amnesia.

Within the domain of memory, analogous phenomena are found in cases of posttraumatic retrograde amnesia (Whitty & Zangwill, 1977; Williams, 1977), which shows appreciable "shrinkage" over time. Somewhat more prosaic examples of spontaneous recovery of forgotten memories have long been studied under controlled conditions in the psychological laboratory. It has long been recognized that a single test of recall may not fairly represent all the items that are available in S's memory (Brown, 1923). When Ss are allowed repeated recall attempts, as in Tulving's (1967) Recall-Test-Test (RTT) paradigm, they will often remember on later trials items that appeared to be forgotten on earlier ones. In many conventional verbal-learning experiments, such recovered items are traded for others that are recalled on earlier trials but forgotten on later ones, such that overall levels of recall remain fairly stable. Under other circumstances, however, intertrial recovery can exceed intertrial forgetting, so that there occurs a net increment in recall over time, without any further study of the items themselves. For example, Ballard (1913) observed that children who had partially memorized stanzas of poetry improved their recall of the material over a period of days, even though they were given no opportunity to study the material again. Interest in the phenomenon has been revived by a series of investigations by Erdelyi and his colleagues (e.g., Erdelyi & Kleinbard, 1978).

The present experiment was intended to explore the spontaneous recovery of memory during posthypnotic amnesia observed by Kihlstrom

⁵Ham, M.L., Radtke, H.L., & Spanos, N.P. The effects of suggestion type and the experience of involuntariness on the breaching of posthypnotic amnesia. Manuscript in preparation, 1983.

et al. (1980). Aside from replicating the earlier findings, it sought to re-examine the contribution to the effect of individual differences in hypnotizability and response to the amnesia suggestion. Another condition was included in the experiment as well, in order to evaluate two competing accounts of the recovery effect: simple remission of the amnesia with the passage of time, or reminiscence due to the administration of the initial recall test. In this condition, a distracting activity was substituted for the test of initial amnesia. This variation controlled for two major factors in reminiscence by eliminating the initial test of amnesia and preventing the period that would be consumed by that activity from effectively extending the recall period assigned to the later test.

METHOD

Subjects

A total of 589 male and female college students received the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) of Shor and E.C. Orne (1962, 1963). Of these, a total of 457 were enrolled in the introductory psychology course at the University of New Hampshire and received credit toward a research participation option; the remaining 132 Ss were enrolled in an upper-division psychology course at Boston College and participated as part of a classroom demonstration of hypnosis. The institutional source of Ss had no effect on the results, and is not further considered in this paper.

Procedure

The HGSHS:A consists of an induction of hypnosis accompanied by a series of 12 representative hypnotic experiences, including a suggestion for posthypnotic amnesia. In the standard form of HGSHS:A, response to the amnesia suggestion is evaluated by means of two memory tests conducted after termination of hypnosis. In the present experiment, the standard procedure was modified only with respect to the amnesia tests. One group of Ss (Retest, $N = 319$) was a precise replication of the Retest group of Kihlstrom et al. (1980): these Ss received the usual test of initial amnesia (Test 1) followed by a retest while the amnesia suggestion remained in effect (Test 2), administration of a pre-arranged reversibility cue to cancel the amnesia, and a final recall test (Test 3). For the other group of Ss (Distraction, $N = 270$), the initial amnesia test (Test 1) was replaced by an arithmetic task (a page of multiplication problems) which Ss were asked to solve quickly and accurately; then they completed a test of amnesia (Test 2), received the reversibility cue, and the final recall test (Test 3). Thus, all Ss received the amnesia suggestion at the same point

in the experimental procedure, but the initial test of amnesia was delayed for those in the Distraction group. The Ss wrote out their memory reports and solved the arithmetic problems in the pages of an appropriately modified HGSHS:A self-report response booklet. Three minutes were allotted for each memory or arithmetic test period. On each test, Ss were asked to report everything that had happened while they were hypnotized.

In addition to the three written memory reports and the standard objective self-scoring procedure of HGSHS:A, Ss also completed a series of inquiries concerning their response to the amnesia suggestion. In the first, Ss were asked simply to indicate by a checkmark whether the amnesia suggestion had been "successful" or "unsuccessful," according to their own subjective criteria, following the procedure outlined by Kihlstrom and E.C. Orne⁶. This was followed by a free-response section patterned after that concerned with Item 9 (Fly Hallucination) on the standard form of HGSHS:A:

1. About the suggestion that YOU COULD NOT REMEMBER — how real was it to you? Was there any doubt about its reality?
2. Did you actually forget some or all of the things you did, or did you just fail to list them on the page when you were asked to do so?
3. Was there any feeling that you were helping the suggestion along?

These questions were intended to elicit additional information concerning Ss' experiences of the amnesia item.

RESULTS

Because the amnesia item of HGSHS:A was not comparable in the Retest and Distraction conditions (due to the interpolated arithmetic task given to the latter group), HGSHS:A scores were corrected by eliminating this item from consideration, yielding an 11-point scale. The mean corrected HGSHS:A score for the combined sample of 589 Ss was 6.61 (*S.D.* = 2.48). These figures are comparable to published norms and to other samples recently drawn from the college population under similar circumstances.

Table 1 displays parametric data separately for the two treatment groups in the present experiment and also for the Retest condition in the study by Kihlstrom et al. (1980). A one-way analysis of variance (ANOVA) of the corrected HGSHS:A scores indicated no significant group differences ($F = 1.68$, $df = 2,701$, *n.s.*). In particular, the difference between the Retest

⁶Kihlstrom, J.F., & Orne, E.C. Retrospective appraisals of hypnotic depth: Correlates with response to suggestion. Manuscript in preparation, 1983.

TABLE 1
HGSHS:A SAMPLE PARAMETERS FOR INSTRUCTIONAL CONDITIONS

Variable	Original Retest ^a	Replication	
		Retest	Distraction
<i>HGSHS:A Scale Score^b</i>			
\bar{X}	6.53	6.78	6.40
S.D.	2.61	2.31	2.65
<i>Initial Amnesia Response^c</i>			
\bar{X}	3.60	2.98	—
S.D.	2.16	2.01	—
<i>Size of Subgroups^d</i>			
High Hypnotizability	45	128	100
(Amnesic, Nonamnesic) ^d	(22,23)	(83,45)	—
Medium Hypnotizability	42	144	102
(Amnesic, Nonamnesic) ^d	(15,27)	(70,74)	—
Low Hypnotizability	28	47	68
(Amnesic, Nonamnesic) ^d	(10,18)	(20,27)	—
Total N	115	319	270

^aData from study by Kihlstrom et al. (1980).

^bCorrected by eliminating the amnesia item. Maximum score = 11.

^cOn Test 1; this data unavailable for Distraction Ss.

^dCorrected HGSHS:A Score: Low (0-4), Medium (5-7), High (8-11); Recall on Test 1: Amnesic (0-3), Nonamnesic (4-9).

and Distraction groups in the present experiment was not significant ($t = 1.84$, $df = 587$, n.s.). Thus, the random assignment of S groups to conditions was fairly successful, in terms of sample parameters. On the basis of the corrected HGSHS:A scores, Ss were classified as low (0-4), medium (5-7), or high (8-11) in hypnotic susceptibility.

Replication of Previous Findings

Kihlstrom et al. (1980) reported that the interpolation of an unstructured retest between the initial amnesia and reversibility tests yielded some degree of recovery of memory. This condition was replicated in the Retest group of the present experiment, and the original result was confirmed. The Ss from the Retest group in the original experiment and the present replication were classified as low, medium, or high in hypnotic susceptibility and as passing or failing the standard criterion for posthypnotic amnesia by recalling three or fewer items on Test 1. A $2 \times 3 \times 2 \times 2$ mixed-design ANOVA with three between-Ss factors (original experiment or replication; low, medium, or high hypnotizability; amnesic or nonamnesic on Test 1) and one within-Ss factor was applied to change scores representing the difference in recall observed between Test 1 and

Test 2 during amnesia, and between Test 2 and Test 3 after the amnesia suggestion was cancelled. There was no significant difference between experiments in the extent of the test-to-test changes in recall, either as a main effect or as an interaction (all $p > .10$). Overall levels of recall were somewhat lower in the present replication than in the original experiment, but the pattern of change conformed to that found previously. Replication of the original results in the present experiment permitted an examination of factors contributing to the increment in recall observed on the retest administered during posthypnotic amnesia.

Subjective Experience of Amnesia

The spontaneous recovery of memory may be related to the degree to which the initial recall deficit represents a subjectively compelling difficulty in remembering, rather than some nonamnesic process. All 319 Ss indicated whether the amnesia suggestion had been subjectively successful or unsuccessful. A total of 197 Ss (61.8% of the total sample) rated the amnesia suggestion as having been subjectively successful. In addition, the free responses to the amnesia inquiry were dichotomously coded according to each of the following three dimensions:

Reality (0 = mention that S actually remembered the items, plus expression of doubt about the reality of the amnesia; 1 = mention that S could not remember at least some items, plus expression of confidence in the reality of the amnesia);

Forgetting (0 = S's statement that he/she failed to list the items, ran out of time, etc.; 1 = S's statement that he/she did not remember at least some items);

Helping (0 = indication that S made no willful effort to prevent recall of the items; 1 = indication that S employed some strategy to interfere with recall).

In some cases, S's response was not informative or indicated lack of understanding of the question, so not all Ss' responses were coded in terms of all three dimensions. Two judges scored the written comments independently, achieving acceptable levels of interjudge reliability (reality, $N = 275$, 84.3% agreement; forgetting, $N = 270$, 91.0%; and helping, $N = 262$, 88.0%). Disagreements were resolved through discussion. Table 2 presents the relationship between each of the subjective ratings and hypnotizability, with amnesic and nonamnesic subjects analyzed separately.

For Ss meeting the standardized criterion for amnesia on Test 1, there was a clear relationship between hypnotizability and subjective impressions that the item had been successful ($X^2 = 13.86$, $df = 2$, $p < .001$). Similar findings were obtained for the objectively amnesic Ss on the

TABLE 2
INITIAL AMNESIA, HYPNOTIZABILITY AND SUBJECTIVE REPORTS CONCERNING AMNESIA

Variable	N	Hypnotizability and Status on Test 1					
		Amnesic			Nonamnesic		
		Low	Medium	High	Low	Medium	High
<i>Subjective Rating</i>	319						
Successful		10	44	70	4	39	30
Unsuccessful		10	26	13	23	35	15
<i>Subjective Reality</i>	275						
Real		4	26	53	2	16	19
Not Real		12	31	17	25	49	21
<i>Subjective Description</i>	270						
Forgetting		11	45	61	11	48	31
Verbal Inhibition		7	12	5	12	19	8
<i>Strategic Helping</i>	262						
Present		8	30	29	8	37	19
Absent		9	21	40	15	27	19

ratings of subjective reality ($X^2 = 19.70$, $df = 2$, $p < .001$) and forgetting ($X^2 = 10.92$, $df = 2$, $p < .005$). Complementary findings were obtained for those Ss who failed the standard criterion for posthypnotic amnesia (success: $X^2 = 18.59$, $df = 2$, $p < .001$; reality: $X^2 = 13.58$, $df = 2$, $p < .005$; forgetting: $X^2 = 7.11$, $df = 2$, $p < .05$). The hypnotizable Ss apparently experienced a more compelling disruption of memory than did their insusceptible counterparts, regardless of whether they passed or failed the standard behavioral criterion for amnesia.

Fully half of Ss (131 out of 262) indicated that they had engaged in some strategic activity in order to facilitate response to the amnesia suggestion. Nevertheless, there was a nonsignificant relationship between reports of helping and the occurrence of amnesia as objectively defined ($X^2 = .14$, $df = 1$, after Yates' correction). For Ss of high hypnotizability, 48 Ss claimed that they helped the suggestion along, but only 29 of these (60.4%) actually became amnesic. By comparison, 59 Ss insisted that they did not help the suggestion, but 40 of these (67.8%) actually became amnesic ($X^2 = .62$, $df = 1$). A similar independence of helping and amnesia was apparent in the other hypnotizability categories as well (medium: $X^2 = .00$, $df = 1$; low: $X^2 = .21$, $df = 1$).

These analyses were repeated employing a strict criterion of reversible amnesia which required both that Ss recall no more than three items on either Test 1 or Test 2, and no fewer than two additional items on Test 3. Of course, the number of Ss passing this criterion was considerably reduced from 173 (54.2%) to 79 (24.8%). The relationships between hyp-

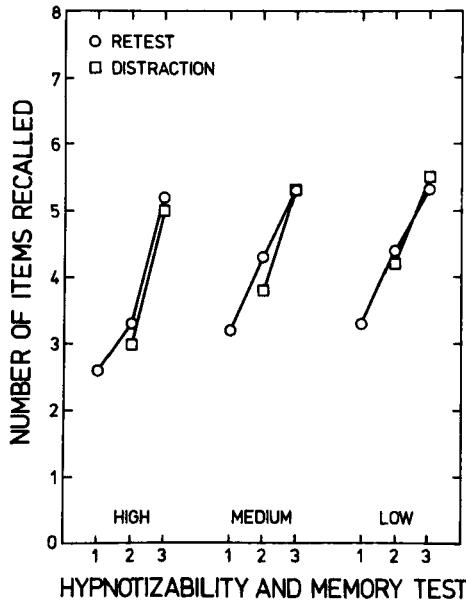


FIG. 1. Mean number of items recalled on three tests of posthypnotic memory in the present experiment. (Test 1 was eliminated in the Distraction condition. See Table 1 for subgroup *N*s.)

notizability and subjective experience of amnesia, and between strategic helping and amnesia, were unchanged when this new criterion was employed.

Individual Differences Related to Breaching Amnesia

The *S*s who met the criterion for initial amnesia on Test 1 were classified as maintaining amnesia if they continued to meet this criterion on Test 2, and as breaching amnesia if they failed it. The *S*s who maintained amnesia were significantly higher in terms of overall hypnotizability, as measured by corrected HGSHS:A scores, compared to those who breached amnesia ($\bar{X} = 7.46$, *S.D.* = 2.15, versus $\bar{X} = 6.66$, *S.D.* = 2.13, respectively; $F = 5.69$, $df = 1, 171$; $p < .01$). A similar difference was obtained for level of initial amnesia: although all *S*s considered in this analysis passed the criterion for amnesia on Test 1, those who maintained this amnesia on Test 2 showed significantly lower levels of recall than those *S*s who later breached it ($\bar{X} = 1.02$, *S.D.* = 1.15, versus $\bar{X} = 2.06$, *S.D.* = 1.17, respectively; $F = 33.21$, $df = 1, 171$; $p < .001$).

An attempt was also made to determine whether *S*s maintaining and breaching amnesia differed on any other dichotomous individual-differ-

ence variable assessed in the present study: subjective success, subjective reality, forgetting as opposed to verbal inhibition, and strategic helping. In addition, the four self-rating variables were combined into a continuous measure of "subjective conviction in amnesia." Breaching amnesia, however, was not related to any of these individual-difference variables, either as a main effect or as an interaction.

Effect of Prior Testing on Recall During Amnesia

Figure 1 presents the average recall on each trial of the present experiment for Ss in the different hypnotizability subgroups within the Retest and Distraction conditions. Because only the Retest group of Ss received the standard amnesia test, Ss are not further classified by response to the amnesia suggestion. Test 1, which was administered only to the Retest Ss, was eliminated and analysis was carried out only on Tests 2 and 3. A $2 \times 3 \times 2$ mixed-design ANOVA with two between-Ss factors (retest versus distraction and level of hypnotizability) and one within-Ss factor (recall tests) revealed significant main effects of Hypnotizability ($F = 9.56$, $df = 2,583$; $p < .001$) and Trials ($F = 339.29$, $df = 1,583$; $p < .001$); the main effect of conditions was not significant ($F = 1.34$, $df = 1,583$; n.s.). There were significant interactions between Trials and both Hypnotizability ($F = 10.82$, $df = 2,583$; $p < .001$) and Conditions ($F = 5.14$, $df = 1,583$; $p < .05$); the three-way interaction was not significant ($F < 1$). The presence of Test 1, then, did not affect overall recall levels shown on subsequent tests. The Trials \times Hypnotizability interaction simply reflects the greater incidence of posthypnotic amnesia among hypnotizable Ss. The Trials \times Conditions interaction indicates that recall was somewhat lower on Test 2 for Ss in the Distraction condition compared to those in the Retest condition (Distraction: $\bar{X} = 3.59$, $S.D. = 2.16$; Retest: $\bar{X} = 3.90$, $S.D. = 2.09$), while recall on Test 3 was almost identical in the two groups ($\bar{X} = 5.27$ versus 5.29 , respectively). The group difference in Test 2 recall, however, did not reach statistical significance ($t = 1.79$, $df = 587$, n.s.). By contrast, recall on Test 1 in the Retest group ($\bar{X} = 2.98$, $S.D. = 2.01$) was significantly lower than recall on Test 2 by the Distraction group ($t = 3.52$, $df = 587$, $p < .001$, 2-tailed).

DISCUSSION

The present study replicated the earlier finding (Kihlstrom et al., 1980) that Ss show a spontaneous recovery of memory during repeated testing of posthypnotic amnesia. Even some highly hypnotizable Ss who manifested a dense amnesia on initial testing showed a significant improvement in memory upon retest, in the absence of any special instructions concerning the manner of recall. A control group of Ss performed a distractor

task designed to discourage Ss from recalling or otherwise processing the critical material during the time that would have been consumed by the initial test. On the remaining memory tests, these control Ss showed levels of recall equivalent to those of the experimental group. Therefore, the effects of repeated testing cannot be attributed to the successful retrieval of memories on the earlier tests, or to the increased time to recall the items which a series of tests necessarily provides.

Apparently, the recovery of memory stems from a remission or decay of the amnesic process with the passage of time. The extent of spontaneous recovery was found to be related to general hypnotizability, with those Ss maintaining amnesia across the two tests scoring higher on the remainder of the hypnotic procedure than those Ss who breached amnesia. Because response to amnesia suggestions is correlated with general hypnotizability (E.R. Hilgard, 1965), it would be expected that the persistence of the effect would also show some correlation. The degree of initial response to the amnesia suggestion was also significantly related to its persistence, with those Ss maintaining amnesia showing a denser initial amnesia than those breaching it. If amnesia decays with time, as seems to be indicated by the present results, this pattern makes sense: Ss who recall only an item at best on the initial test will require more time before they can recover enough additional material that they fail the criterion; Ss who recall two or three items at the outset have less far to go over the same amount of time. It remains to be seen how long it would take a highly hypnotizable, densely amnesic S to recover so much material that he/she can no longer be sensibly classified as amnesic.

The present study found no relationships between breaching amnesia and any of the subjective qualities of amnesia response assessed posthypnotically (subjective success, subjective reality, experience of forgetting, strategic helping, or subjective conviction). Coe and his colleagues (Howard & Coe, 1980; Schuyler & Coe, 1981) have found that a dimension of voluntary control over the amnesia response—a construct closely related to the “strategic helping” of the present study—is related to breaching. The contradiction between their results and the present ones, however, may be more apparent than real. Coe inserted strong honesty demands before the critical amnesia assessment, while Ss in the present study were unchallenged. Kihlstrom et al. (1980) found that an honesty demand, assessed in isolation, had no effect on the persistence of amnesia, while the present study found no effect of strategic helping, again assessed in isolation. In line with recent conceptualizations of personality dynamics (e.g., Bowers, 1973; Mischel, 1973), the crucial factor may be the interaction between a situational manipulation and a relevant individual-difference variable.

Among those Ss who passed the standard criterion for initial amnesia, hypnotizable Ss reported that their experience was more convincing than did insusceptible Ss. It is also interesting to note that among the nonamnesic Ss, a large percentage of hypnotizables reported that the amnesia suggestion was subjectively successful. These Ss may have manifested a partial amnesia, successfully recalling enough items that they failed the standard criterion while still experiencing difficulty doing so. Along the same lines, most of the insusceptible Ss who were recorded as passing the amnesia item reported that the suggestion was not subjectively compelling. This represents a possible pseudoamnesia, indicating that the amnesia test of HGSHS:A is contaminated by a number of irrelevant factors.

Especially interesting were the relationships among hypnotizability, initial amnesia, and the coding variable of "helping." As has been found by others (e.g., Spanos & Bodorik, 1977; Spanos, Radtke-Bodorik, & Stam, 1980; see Kihlstrom, 1978), a few Ss indicated that they failed to report some remembered items to *E*, while many more reported that they engaged in some strategic cognitive activity designed to help the suggestion achieve its intended effect. Only a minority of amnesic Ss (17.0%) admitted to verbal inhibition, a figure that is consistent with other findings (e.g., Spanos & Bodorik, 1977; Spanos, Radtke-Bodorik, & Stam, 1980; Spanos, Stam, D'Eon, Pawlak, & Radtke-Bodorik, 1980). More to the point, strategic helping was completely unrelated to the occurrence of amnesia. Other studies which have addressed this issue in the past have found, at best, only a weak relationship between the two variables (Kihlstrom, 1978). In the study by Spanos and Bodorik (1977), for example, 52% of hypnotic and task-motivated Ss reported that they tried to forget the critical material, but only 22% of these showed any degree of amnesia; of the remaining 48%, who did not report engaging in strategic forgetting, 32% nonetheless showed partial or complete amnesia. Other published studies do not provide such detailed analyses, but they make the same point: Spanos, Stam, D'Eon, Pawlak, and Radtke-Bodorik (1980) report that 30% of amnesic Ss defined their forgetting as effortless; Spanos, Radtke-Bodorik, and Stam (1980, Experiment 1) report that of hypnotic Ss showing amnesia, 64% indicated that they did not actively try to forget the material. The lack of a strong relationship between amnesic response and strategic cognitive activity presents some problems for theoretical accounts of amnesia that emphasize such activity. Ultimately, any theory of posthypnotic amnesia will have to describe the processes underlying effortless as well as strategic forgetting.

A failure of posthypnotic memory may reflect a number of processes other than those initiated by the suggestion. If state-dependent retention

were involved, the forgetting could be reversed by reinducing hypnosis, in the absence of the cue. Ordinary forgetting, misunderstanding of the test instructions, and absentmindedness may also contaminate S's response to amnesia suggestions, but it is unlikely that these pseudoamnesic factors would be corrected by the mere administration of a reversibility cue. In the present study, some Ss' initial failure of memory corrects itself, as it were, without reinduction and in the absence of the reversibility cue. In these cases, we may also suspect a form of pseudoamnesia. The transition from hypnosis back to the normal waking state of consciousness may be marked by a brief disorientation and other minor sequelae (for a review, see Crawford, J.R. Hilgard, & Macdonald, 1982) which may temporarily interfere with normal retrieval processes. As these effects dissipate, S's true level of response to the amnesia suggestion will be revealed.

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Spontane Restitution des Gedächtnisses während posthypnotischer Amnesie

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Abstrakt: Wiederholtes Prüfen der posthypnotischen Amnesie zeigt an, daß einige, ursprünglich auf Suggestion reagierende Vpn., eine merkliche Restitution des Gedächtnisses zeigten, bevor ein vorher arrangiertes Signal zur Aufhebung der Amnesie gegeben worden war. Ein Vergleich zwischen Vpn., denen 2 aufeinanderfolgende Gedächtnistests während der Amnesie gegeben worden waren mit andern, die nur einen einzigen Test erhalten hatten und dem eine ablenkende Aktivität vorausgegangen war, zeigten, daß der Restitutionsseffekt mehr dem Zeitablauf als dem vorhergegangenen Proben zuzuschreiben war. Es fanden sich große, individuelle Unterschiede in dem Ausmaß der Restitution, wobei einige der Vpn. eine recht kompakte Amnesie bis über den zweiten Test hin aufrechterhielten. Jene Vpn., die ihre Amnesie instandhielten, waren stärker hypnotisierbar und zeigten eine kompaktere, ursprüngliche Amnesie als solche, die sie nicht aufrechterhielten. Eine Analyse der subjektiven Berichte schenkte der Idee Glaubwürdigkeit, daß eine teilweise Reaktionsfähigkeit unter einigen hypnotisierbaren Vpn., bestand, die in der Erfüllung eines Standardkriteriums für völlige Amnesie versagten und Pseudoamnesie unter einigen unempfindlichen Vpn., die es scheinbar erfüllten. Einige Vpn., berichteten über freiwilliges Teilnehmen an einer kognitiven Aktivität, die so angelegt war, ein Vergessen zu induzieren, doch waren diese Berichte weder mit dem Erstehen der ursprünglichen Amnesie noch ihrer Fortdauer verbunden. Ein Versagen des Gedächtnisses, das momentane Disorientierung durch Übergang von einem geistigen Zustand in einen andern reflektiert, sollte begrifflich von einer reversiblen Amnesie, die durch hypnotische Suggestion eingeführt worden ist, unterschieden werden.

Remémoration spontanée durant l'amnésie posthypnotique

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Résumé: Des évaluations successives de l'amnésie posthypnotique montrent que certains sujets qui, au début, répondaient à la suggestion, manifestent une remémoration appréciable avant que le signal prévu soit donné pour lever l'amnésie. En comparant des sujets soumis à deux tests de remémoration durant l'amnésie à d'autres soumis à un seul test précédé d'une tâche de distraction, il est trouvé que l'effet de remémoration est plus attribuable au passage du temps qu'à l'évaluation première. Il existe d'énormes différences

individuelles dans l'ampleur de la remémoration, et certains sujets conservent une amnésie très forte même après le second test. Les sujets qui conservent l'amnésie à travers les deux tests sont plus hypnotisables et présentent une amnésie initiale plus forte que ceux qui la brisent en cours de route. Une analyse des rapports subjectifs soutient les notions de réponse partielle chez les sujets hypnotisables ne pouvant satisfaire le critère standard d'amnésie complète et de pseudoamnésie chez les sujets peu hypnotisables semblant réussir. Certains sujets rapportent s'être volontairement engagés dans une activité cognitive afin de favoriser l'oubli mais ces rapports ne sont reliés ni à la présence de l'amnésie initiale, ni à sa persistance. Un échec de la mémoire reflétant une désorientation momentanée dans la transition entre un état mental et un autre doit être distingué au niveau conceptuel d'une amnésie réversible produite par suggestion hypnotique.

Recuperación espontánea de la memoria durante la amnesia poshipnótica

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Resumen: Repetidos tests de amnesia poshipnótica indican que algunos sujetos, que inicialmente responden a la sugestión, muestran una recuperación apreciable de la memoria con anterioridad a que una señal arreglada de antemano sea dada para revocar la amnesia. La comparación de sujetos que recibieron, durante la amnesia, dos tests de memoria sucesivos, con otros que recibieron un solo test, precedido por una actividad perturbadora, indicaron que el efecto de recuperación era atribuible al paso del tiempo más bien que al test anterior. Hubo amplias diferencias individuales en el alcance de la recuperación, algunos sujetos mantuvieron una amnesia bastante importante en el segundo test. Aquellos sujetos que mantuvieron la amnesia eran más sugestionables hipnóticamente y mostraron una amnesia inicial más profunda que aquellos que la quebraron. El análisis de los reportes subjetivos daba crédito a la noción de respuesta parcial entre algunos sujetos, que si bien eran sugestionables hipnóticamente, no lograron reunir el criterio standard de amnesia completa y pseudoamnésia entre otros sujetos no susceptibles que pasaron a través de ella. Ciertos sujetos reportaron un compromiso voluntario en actividades cognitivas diseñadas para inducir olvido, pero estos reportes no estaban relacionados ni a la aparición de la amnesia inicial, ni a su persistencia. Se debe distinguir conceptualmente una amnesia reversible iniciada bajo sugestión hipnótica, de una falla de la memoria que refleja una desorientación momentánea en la transición de un estado mental a otro.