AUSTRALIAN JOURNAL OF CLINICAL AND EXPERIMENTAL HYPNOSIS

May 1992	Volume 20	Number 1
THE OUTPUT INHIBITION MODEL OF POST-HYPN PRELIMINARY FINDINGS Lorne D. Bertrand, H. Lorraine Radtke, Henderikus J. S. D. Craig Willcox	Stam, Carol B	. Scott, and
HYPNOTHERAPY Edouard Collot	•••••	I3
BROADENING THE CLINICAL USE OF HYPNOTIC T Lorna D. Channon-Little and Jennifer R. Flatt	ECHNIQUES	23
USING HYPNOTIC SUCCESS IMAGERY TO REDUCE Harry E. Stanton	E TEST ANXII	ETY 31
THE TREATMENT OF IRRITABLE BOWEL SYNDROLLisa J. Chantler and Christopher Edwards	ME USING I	HYPNOSIS
"HYPNOSIS OR NOT?": BRIEF INTERVENTION NEEDLE PHOBIC	WITH HYPO	ODERMIC
CASE NOTES, TECHNIQUES, AND ANECDOTES		_
BOOK REVIEWS		59

AUSTRALIAN JOURNAL OF CLINICAL AND EXPERIMENTAL HYPNOSIS

Copyright ©The Australian Society of Hypnosis Limited 1992

EDITORIAL BOARD

Editor

Wendy-Louise Walker, BA, PhD, University of Sydney, N.S.W.

Medical Editor

J. Arthur Jackson, MB, ChB, FRACGB, Dobs RCOG

Associate Editors

Susan E. Ballinger, BA, PhD, University of Sydney, N.S.W.
Lorna D. Channon-Little, BSc, MSc, PhD, University of Sydney, N.S.W.
John K. Collins, BA, PhD, Macquarie University, N.S.W.
Douglas Farnill, BA, BD, PhD, University of Sydney, N.S.W.
Kevin McConkey, BA, PhD, Macquarie University, N.S.W.

EDITORIAL CONSULTANTS

Graham D. Burrows, MD, ChB, BSc, DPM, FRANZCP, FRCPsych, University of Melbourne

Harold B. Crasilneck, PhD, PC, The University of Texas Health Science Center, Southwestern Medical School, Dallas, Texas

Frederick J. Evans, PhD, Carrier Foundation and UMDNJ Rutgers Medical School

Fred H. Frankel, MB, ChB, DPM, Beth Israel Hospital and Harvard Medical School Ernest R. Hilgard, PhD, Stanford University Martin T. Orne, MD, PhD,

The Institute of Pennsylvania Hospital and the University of Pennsylvania Campbell Perry, PhD, Concordia University, Montreal Peter W. Sheehan, PhD, University of Queensland

EDITORIAL ASSISTANT Darvl Hood

FEDERAL EXECUTIVE OF

THE AUSTRALIAN SOCIETY OF HYPNOSIS LIMITED

President: Mr David Henty (Tasmania)

President Elect: Mr Robb Stanley (Victoria)

Past President: Dr Michael Boyd (South Australia)

Federal Secretary: Dr Mark Earl (South Australia)

Federal Treasurer: Dr Barry Evans (Victoria)

Chairman - Publications: Dr Wendy-Louise Walker (NSW)

Chairperson - Board of Education: Mr Robb Stanley (Victoria)

I.S.H. Representatives: Dr Jim Rodney (Queensland),

Dr Graham Wicks (South Australia)

A.S.H. Federal Secretariat, Edward Wilson Building, Austin Hospital, HEIDELBERG, Vic. 3084 Fax: (03) 459 6244 Tel: (03) 459 9404

Manuscripts and editorial matters should be addressed to the Editor, Dr Wendy-Louise Walker, 14 Hammond Avenue, Croydon, NSW 2132, Australia. All journal business communications and subscriptions should be addressed to the Editor.

THE OUTPUT INHIBITION MODEL OF POST-HYPNOTIC AMNESIA: SOME PRELIMINARY FINDINGS

Lorne D. Bertrand

Bertrand & Elnitsky Associates

H. Lorraine Radtke, Henderikus J. Stam, Carol B. Scott, and D. Craig Willcox The University of Calgary

An output inhibition model has been proposed to account for hypnotic amnesia effects (Huesmann, Gruder, & Dorst, 1987). According to this formulation, when an amnesia suggestion is presented, the critical material is retrieved into working memory, where it is processed and tagged as "forbidden". When explicit output is later requested on either a recall or recognition task, the material once again enters working memory, where the tags are encountered and the material is denied output. One prediction derived from this model is that material most efficiently learned during acquisition ("easy" material) will have a higher probability of being retrieved and tagged during presentation of the suggestion than material less efficiently learned ("difficult" material). The easy material should then have a higher probability of being recalled than the difficult material following removal of the tags when the suggestion is cancelled. The difficult material, on the other hand, should have a higher probability of being recognised than the easy material during the amnesia period because this material would have a lower probability of being tagged during presentation of the suggestion. These hypotheses were assessed in two experiments which defined easy and difficult material in terms of high and low meaningful words. Results indicated that differences were obtained between the two types of items both during and after amnesia (i.e., the easy items were recalled with a higher frequency). Contrary to the predictions of the output inhibition model, however, no selective enhancement in recall of easy items was observed following cancellation, and no differences in the recognition of easy and difficult items were obtained during amnesia.

Hypnotic amnesia is defined in terms of temporary suggestion-induced performance deficits on memory tasks (Coe, 1978; Evans & Kihlstrom, 1973). The ease with which these deficits are reversed following presentation of a cancellation cue indicates that the locus of the hypnotic amnesia effect is at

This research was supported by a National Sciences and Engineering Research Council of Canada Postdoctoral Fellowship and a University of Calgary Research Fellowship held by the first author. Requests for reprints should be sent to Lorne D. Bertrand, Bertrand & Elnitsky Associates, 107 Rundleridge Road NE, Calgary, Alberta T1Y 2J6, Canada.

2

the level of memory retrieval processes, rather than at the level of either memory encoding or storage (Kihlstrom, 1985). While these definitional issues have resulted in little controversy, considerable debate has arisen in recent years concerning the cognitive processes responsible for amnesia.

Two dominant theoretical perspectives that have been presented to account for hypnotic amnesia effects are the neodissociation model (Hilgard, 1977; Kihlstrom, 1985) and the response strategy, or inattention, hypothesis (Bertrand & Spanos, 1985; Spanos, 1986; Spanos, Radtke-Bodorik, & Stam, 1980). According to the neodissociation position, amnesia results when memories that are targeted by the hypnotic suggestion are "split-off" or dissociated from conscious awareness. This hypothesis holds that amnesia occurs automatically and renders the amnesic material inaccessible to the participant. The response strategy hypothesis, on the other hand, proposes that hypnotic amnesia does not represent an automatic process over which research participants exert little voluntary control; instead, this position holds that amnesia reflects strategic behaviours carried out by participants in an attempt to fulfill the task demands. Hypnotic participants do not lose control of their memory processes, but rather engage in cognitive strategies such as self-distraction that lead them to forget the critical material temporarily.

Several studies indicate that while amnesic persons fail to report the critical material on recall and recognition tasks, this material continues to exert an indirect influence on other memory tasks such as word association (Kihlstrom, 1980; Spanos, Radtke, & Dubreuil, 1982; Williamsen, Johnson, & Eriksen, 1965), semantic priming (Bertrand, Spanos, & Radtke, 1990), and retroactive and proactive interference (Coe, Basden, Basden, & Graham, 1976; Dillon & Spanos, 1983). In light of these findings, Huesmann, Gruder, and Dorst (1987) suggested that neither the neodissociation nor the response strategy hypotheses can account for all of the observed affects of hypnotic amnesia. These investigators have proposed a new model, referred to as the output inhibition hypothesis, in an attempt to account more fully for the available data. This hypothesis holds that when participants are administered a hypnotic amnesia suggestion for previously learned material, this material is retrieved into working memory where it is processed and tagged as "forbidden." When they are requested to report this material explicitly on either a recall or recognition task while the suggestion is in effect, it is once again retrieved into working memory where the forbidden tags are encountered and it is denied output. According to Huesmann et al. (1987), since this material must enter working memory at retrieval time before the forbidden tags are detected, it can indirectly influence performance on other tasks such as those discussed above; however, explicit output in the form of recall or recognition will be inhibited.

In support of the output inhibition model, Huesmann et al. (1987, exp. 1) presented the results of an experiment in which they trained participants to use one particularly long algorithm to solve a series of Luchins' (1942)

water-jar problems. Once they had learned this algorithm, they were administered an amnesia suggestion instructing them to forget the problems that they had solved as well as any methods they had learned for solving them. Participants assigned to the amnesia release condition had the suggestion cancelled prior to the test phase of the study; for those in the amnesia group the suggestion was in effect during this phase. On a test of recall, participants in the hypnotic amnesia group exhibited amnesia for the previously learned long algorithm. Next, all participants were presented with four new waterjar problems, three of which could be solved by either the previously learned long method or by a shorter algorithm. Participants in both groups exhibited the classic Einstellung effect (Luchins, 1942) by solving the problems using the long method, even when a shorter solution was available, and even though the participants in the amnesia group had previously shown recall amnesia for the long algorithm. This pattern of results indicates that prior learning continued to influence the amnesics' performance on the subsequent test problems. Presumably, the training problems and their solution were tagged as forbidden and thus could not be output on an explicit recall test; however, this material exerted an indirect effect on subsequent behaviour.

Several specific predictions may be derived from the output inhibition model. First, because previously learned material must be retrieved into working memory when an amnesia suggestion is presented in order to be tagged as forbidden, the material with the highest probability of being retrieved and tagged will be the material that was most efficiently learned during acquisition (i.e., the "easier" material; Huesmann et al., 1987). Material that was less efficiently learned ("difficult" material) would have a lower probability of being tagged as forbidden. Second, items which are tagged during administration of an amnesia suggestion (i.e., the easier items) will be the ones most likely to be recalled following removal of the tags when the suggestion is cancelled. Third, if a recognition test is administered following a recall test during amnesia. the items missed during recall most likely to be now correctly recognised will be the more difficult ones (Huesmann et al., 1987). This should occur because the easier items will still be tagged during the recognition task, and therefore their output will be denied. The more difficult items, however, have a lower probability of being tagged, and are more likely to be elicited due to the more efficient retrieval cues present during recognition testing. The present investigation assessed these hypotheses in two experiments which defined easy and difficult words in terms of their meaningfulness. High meaningful items have been shown to be more easily learned than low meaningful words within the context of normal memory research (e.g., Underwood & Schulz, 1960). Thus, the construct of meaningfulness should provide a valid assessment of the output inhibition model.

EXPERIMENT 1

METHOD

Research Participants

Seventy-two University of Calgary undergraduates (41 females and 31 males; mean age 22.3 years) volunteered to participate in a two-session experiment on hypnosis and memory. None had previously participated in a hypnosis study. Participants received \$3 per session as compensation for their time.

Stimulus Materials

Twelve words designated as high meaningful (mean rating of greater than 5.00; "easy" items) and twelve words designated as low meaningful (mean rating of less than 3.00; "difficult" items) were selected from the norms of Toglia and Battig (1978) to comprise the stimulus list. An additional 12 high meaningful and 12 low meaningful items were selected as "fillers" for the recognition task. All words were mono- or disyllabic.

Procedure

Session 1. All participants were administered a tape-recorded version of the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A; Shor & Orne, 1962) in small groups of two to five.

Session 2. Upon arrival at the laboratory, participants were assigned randomly to either the experimental or control group with the restriction of an equal number within each group (n=36). All participants initially received a 10-min tape-recorded hypnotic induction modified from Barber (1969), which was followed by tape-recorded instructions regarding the learning task. These instructions informed participants that they would hear a tape-recorded list of words, and at the end of the list they would be given 2 min to recall, in writing, as many words as they could remember. The words comprising the stimulus list were presented randomly at the rate of 2 sec per item.

Following learning, participants in the experimental group were administered a post-hypnotic amnesia suggestion and waking instructions used by Kihlstrom (1980). These instructions informed them that they would forget all of the stimulus items until the suggestion was cancelled via a prearranged cue. The amnesia suggestion was omitted for participants in the control group to provide for a test of the occurrence of amnesia in the experimental group; instead, the control group simply received waking instructions. All participants were then given a recall trial as described above in the learning phase, which was followed by the recognition task. During recognition testing, participants were given two sheets of paper containing the 24 stimulus items as well as the 24 filler words in random order. They were requested to rate each word on a 5-point scale ranging from "Completely certain the word was on the stimulus list" (scored 1) to "Completely certain the word was not on the stimulus list"

(scored 5). Participants were allowed 2 min to complete this task. For purposes of analysis, any item rated 1 or 2 was scored as a positive recognition. completion of the recognition task, amnesia was cancelled for the experimental group, and all participants received final recall and recognition trials. Participants were then debriefed, paid, and dismissed.

RESULTS AND DISCUSSION¹

Recall Data

The output inhibition model predicts that the critical material which is most efficiently learned during acquisition will have the highest probability of being tagged as forbidden when an amnesia suggestion is presented. Consequently, the "easy" material should have a higher probability of being recalled after the suggestion is cancelled than more difficult material. Within the present context, this prediction suggests that the high meaningful items will have a higher probability of being tagged, and hence a higher probability of improvement in recall after cancellation. To assess this hypothesis a 2 × 2 × 2 mixed design analysis of variance (ANOVA) with one between-subjects variable (experimental/control groups) and two within-subjects variables (high/low meaningful words; during/after amnesia recall trials) was conducted on the number of words recalled. This analysis yielded a significant main effect for the high/low meaningful variable, F(1,70) = 29.21, p < .001, indicating that the high meaningful words (M = 4.42, SD = 2.04) were recalled with a higher frequency than the low meaningful items (M = 3.27, SD = 1.69). In addition, a significant main effect for trials, F(1.70) = 94.02, p < .001, indicated that recall levels were lower on the recall trial corresponding to the amnesia test period (M = 3.30, SD = 1.81) than on the trial following cancellation (M = 4.44,SD = 1.96). However, the fact that this effect was collapsed across the group variable indicates that this difference was not due to the amnesia suggestion. Contrary to prediction, the three-way interaction was nonsignificant.

Recognition Data

The output inhibition model also predicts that if a recognition task is administered during amnesia, the difficult items should have a higher probability of being correctly recognised than the easy items. This occurs because the difficult items will not be tagged, and thus the enhanced retrieval cues present during recognition testing should lead to their output. To assess this prediction, two conditional probabilities were calculated for each participant reflecting the number of high and low meaningful items not recalled during the amnesia trial that were correctly recognised. According to the model, the conditional probability for the low meaningful items should be higher than the probability for the high meaningful items within the amnesia group. This prediction was assessed with a 2 × 2 mixed ANOVA (experimental/control groups × high/ low meaningful items) conducted on the probabilities. The main effect of item

type was significant, F(1,70) = 12.96, p < .001; however, this effect was qualified by a significant interaction of groups by item type F(1,70) = 5.25, p < .05. The means for this interaction are presented in Table 1.

Follow-up simple main effects analyses indicated that the only means which differed in this interaction were within the control group, F(1,70) = 16.45, p < .001. The probability of recognising a low meaningful word when that word had not previously been recalled was greater than the corresponding probability for the high meaningful items. However, the failure to observe a difference within the experimental group again fails to support the output inhibition model.

EXPERIMENT 2

One problem with Experiment 1 was the failure to find any significant group differences in patterns of recall. This may be attributed to the relatively low levels of initial learning prior to presentation of the amnesia suggestion. After a single presentation of a 24-item list, acquisition levels may have been too unstable to distinguish amnesia responding from normal forgetting. For this reason, Experiment 2 replicated the first study but modified the learning procedure to include three learning trials in an attempt to stabilise baseline acquisition levels. In addition, only participants who scored 6 and above during pretesting on the HGSHS:A were tested on the amnesia task. Several studies (e.g., Hilgard & Cooper, 1965; Kihlstrom & Shor, 1978; Spanos & Radtke, 1982) have reported that hypnotic susceptibility and incidence of amnesia are correlated to a moderate to high degree. Thus, the selection of participants according to a more stringent susceptibility criterion than that used in Experiment 1 was expected to enhance the presence of amnesia.

Table 1 Mean conditional probabilities for number of items not recalled but correctly recognised on amnesia trial in Experiment 1

	High meaningful	Low meaningful	
Experimental group			
M	.64a	.69a	
SD	.27	.24	
Control group			
M	.58a	.79 _b	
SD	.26	.16	

Note. For each mean n = 36. Within a row, means sharing a common subscript fail to differ significantly at p = .05.

METHOD

Research Participants

Sixty-seven University of Calgary undergraduates (29 males and 38 females; mean age 21.4 years) volunteered to participate in a single group session during which the HGSHS:A was administered. Of these participants, 28 (15 females and 13 males) scored 6 or above on the HGSHS:A and agreed to participate in the second (amnesia) session. None of these people had participated in Experiment 1, and they received \$3 for each session.

Stimulus Materials

The high and low meaningful items used in Experiment 1 were also employed in this experiment.

Procedure

Session 1. All participants were administered a tape-recorded version of the HGSHS:A in small groups of two to five.

Session 2. Participants who scored 6 and above on the HGSHS:A returned to the laboratory for a second session during which they were administered the amnesia tasks. Upon arrival at the laboratory, participants were assigned randomly to either an experimental or control group with the restriction of an equal number (n = 14) per group. The procedure for these groups was identical to that employed in Experiment 1 with the exception that all participants received three initial learning trials. On each trial, the stimulus list was presented in a different random order and, following each presentation. participants were allowed 2 min to recall, in writing, as many words as they could remember.

RESULTS AND DISCUSSION

Recall Data

The number of words correctly recalled was analysed with a $2 \times 2 \times 2$ mixed ANOVA (experimental/control groups × high/low meaningful items × during/ after amnesia trials). A significant main effect for item type, F(1,26) = 53.23, p < .001, indicated that high meaningful words (M = 8.61, SD = 2.39) were recalled more frequently than low meaningful items (M = 5.52, SD = 2.19). A significant main effect for the trials variable was also obtained, F(1,26) = 17.03, p < .001; however, this effect was qualified by a significant interaction of groups × trials, F(1,26) = 9.68, p < .01. The means for this interaction are presented in Table 2. Follow-up simple main effects analyses indicated that the experimental group exhibited a significant increase in recall from during to after the suggestion period, F(1,26) = 13.12, p < .01; however, the control group did not differ in recall across the two trials, F(1,26) < 1. In short, the experimental group did exhibit amnesia which was reversed

	During amnesia	After amnesia	
Experimental group			
M	5.89_{a}	7.93 _b	
SD	2.70	2.82	
Control group			
M	7.07 _a	7.36_{a}	
SD	2.68	2.60	

Table 2 Mean recall scores for groups × trials interaction in Experiment 2

Note. For each mean n = 14. Within a row, means sharing a common subscript fail to differ significantly at p = .05.

following cancellation. However, the failure of the three-way interaction to achieve significance once again fails to support the predictions of the output inhibition model.

Recognition Data

As in Experiment 1, conditional probabilities reflecting the number of high and low meaningful items not recalled on the amnesia trial that were correctly recognised were computed for each participant. These probabilities were analysed with a 2 × 2 (groups × high/low meaningful items) mixed ANOVA. Neither the main effects nor the interaction approached significance.

OVERVIEW

The present report represents the first attempt to test directly specific predictions derived from the output inhibition model aside from the investigations reported by Huesmann et al. (1987). The results obtained in the experiments reported here failed to provide support for these hypotheses. According to the output inhibition model, the material to be covered by an amnesia suggestion is retrieved into working memory and tagged as forbidden when a suggestion is presented. At recall time, the material is once again retrieved into working memory; however, at this point the forbidden tags are encountered and the material is denied explicit output. The material with the highest probability of being tagged when the suggestion is presented is the material that was most efficiently learned during acquisition. In the present studies, acquisition levels were manipulated by varying the word attribute of meaningfulness. Evidence was obtained in both experiments to indicate that this manipulation was successful. In both cases, high meaningful items were recalled with a higher frequency than were low meaningful words, thereby replicating previous research with normal memory. However, in both experiments this effect was collapsed across both the group variable and the recall trial variable. Selective enhancement in recall of high meaningful items should have been observed for amnesic participants following amnesia cancellation; its absence fails to support the predictions derived from the output inhibition model. One limitation of Experiment 1 was the failure to observe any group differences in recall during the amnesia test period, which did not allow a distinction to be drawn between the performance of amnesic and nonamnesic participants. However, the data from Experiment 2 clearly indicate that participants in the suggestion group exhibited amnesia; nevertheless, the pattern of results predicted by the model failed to emerge.

The findings obtained on recognition testing also failed to provide support for the model. Due to the more efficient retrieval cues present during recognition testing, amnesic participants should have been more likely to correctly recognise the difficult (i.e., low meaningful) items, as these items would not have been tagged as forbidden during presentation of the suggestion. This pattern did not emerge in the present experiments.

It is important to bear in mind that the present experiments tested specific predictions derived from the output inhibition model concerning the relationship between ease of encoding and recall and recognition performance. The present investigation operationalised ease of encoding by employing one particular word attribute (meaningfulness); future research could be directed towards defining ease of encoding in other ways. For example, other word attributes that have been shown to affect encoding such as familiarity or imagery value could be investigated; conversely, attributes of the critical list such as serial position could be investigated. Until such future research is conducted, it may be premature to conclude that the output inhibition model is flawed.

The hypotheses considered by Huesmann et al. (1987) in their studies were somewhat different from those tested here, as was the amnesia testing paradigm employed, and thus the present findings do not constitute a failure to replicate. Huesmann et al. (1987) assessed the hypothesis that material for which participants displayed recall amnesia would continue to be employed on indirect tasks, and their results are consistent with those reported in several recent investigations. For example, Kihlstrom (1980) and Spanos et al. (1982) found that amnesic items continued to be generated as associates on a word association task, and Bertrand et al. (1990) found that amnesic words were written correctly on a spelling task. Presumably, all of these findings could be explained by the output inhibition model. More problematic for this model, however, were additional findings obtained by Spanos et al. (1982) and Bertrand et al. (1990) which indicated that these effects could be eliminated by modifying the wording of the amnesia suggestion slightly. It is unclear how such results would be interpreted by the output inhibition model. Given the findings of Spanos et al. (1982) and Bertrand et al. (1990), as well as those of the present investigation, it appears that further elaboration of the model is necessary in order to determine the extent to which it can account for all of the available amnesia data.

10

REFERENCES

- Barber, T. X. (1969). Hypnosis: A scientific approach. New York: Van Nostrand Reinhold.
- Bertrand, L. D., & Spanos, N. P. (1985). The organisation of recall during hypnotic suggestions for complete and selective amnesia. *Imagination, Cognition, and Personality*, 4, 249–261.
- Bertrand, L. D., Spanos, N. P., & Radtke, H. L. (1990). Contextual effects on priming during hypnotic amnesia. *Journal of Research in Personality*, 24, 271–290.
- Coe, W. C. (1978). The credibility of posthypnotic amnesia: A contextualist's view. *International Journal of Clinical and Experimental Hypnosis*, 26, 218-245.
- Coe, W. C., Basden, B., Basden, D., & Graham, C. (1976). Posthypnotic amnesia: Suggestions of an active process in dissociative phenomena. *Journal of Abnormal Psychology*, 85, 455–458.
- Dillon, R. F., & Spanos, N. P. (1983). Proactive interference and the functional ablation hypothesis: More disconfirming data. *International Journal of Clinical and Experi*mental Hypnosis, 31, 47-56.
- Evans, F. J., & Kihlstrom, J. F. (1973). Posthypnotic amnesia as disrupted retrieval. Journal of Abnormal Psychology, 82, 317-323.
- Hilgard, E. R. (1977). Divided consciousness: Multiple controls in human thought and action. New York: John Wiley.
- Hilgard, E. R., & Cooper, L. M. (1965). Spontaneous and suggested posthypnotic amnesia. International Journal of Clinical and Experimental Hypnosis, 13, 261–273.
- Huesmann, L. R., Gruder, C. L., & Dorst, G. (1987). A process model of posthypnotic amnesia. *Cognitive Psychology*, 19, 33-62.
- Kihlstrom, J. F. (1980). Posthypnotic amnesia for recently learned material: Interactions with "episodic" and "semantic" memory. *Cognitive Psychology*, 12, 227–251.
- Kihlstrom, J. F. (1985). Hypnosis. Annual Review of Psychology, 36, 385-418.
- Kihlstrom, J. F., & Shor, R. E. (1978). Recall and recognition during posthypnotic amnesia. *International Journal of Clinical and Experimental Hypnosis*, 26, 330-349.
- Luchins, A. S. (1942). Mechanisation in problem solving the effect of Einstellung. *Psychological Monographs*, 54 (6).
- Shor, R. E., & Orne, E. C. (1962). The Harvard Group Scale of Hypnotic Susceptibility, Form A. Palo Alto, CA: Consulting Psychologists Press.
- Spanos, N. P. (1986). Hypnotic behavior: A social psychological interpretation of amnesia, analgesia, and trance logic. Behavioral and Brain Sciences, 9, 449-467.
- Spanos, N. P., & Radtke, H. L. (1982). Hypnotic amnesia as a strategic enactment: A cognitive social psychological perspective. Research Communications in Psychology, Psychiatry, and Behavior, 7, 215-231.
- Spanos, N. P., Radtke, H. L., & Dubreuil, D. L. (1982). Episodic and semantic memory in posthypnotic amnesia: A reevaluation. *Journal of Personality and Social Psychology*, 43, 565-573.
- Spanos, N. P., Radtke-Bodorik, H. L., & Stam, H. J. (1980). Disorganised recall during suggested amnesia: Fact not artifact. *Journal of Abnormal Psychology*, 89, 1-19.
- Toglia, M. P., & Battig, W. F. (1978). Handbook of semantic word norms. Hillsdale, NJ: Erlbaum.
- Underwood, B. J., & Schulz, R. W. (1960). *Meaningfulness and verbal learning*. Philadelphia, PA: Lippincott.

- Williamsen, J. A., Johnson, H. J., & Eriksen, C. W. (1965). Some characteristics of posthypnotic amnesia. Journal of Abnormal Psychology, 70, 123-131.
- ¹ All of the analyses presented below were also conducted using hypnotic susceptibility (low, 0-4; medium, 5-8; high, 9-12) as an additional factor. No significant main effects or interactions with susceptibility emerged, and thus these analyses are not discussed further.



HYPNOTHERAPY

Edouard Collot

French Hypnosis Institute

Illustrated by the case study of Veronique, this paper considers the processes of communication in modern hypnoanalysis, focusing particularly on communication through the imaginative, regressive mode.

After several decades of studies carried out in the United States and in Eastern and Western Europe, including the work of Dr L. Chertok, the state of hypnosis is no longer regarded by specialists in the field as a marginal phenomenon. Rid of its romantic and spiritual connotations and freed from the role of the scapegoat of psychoanalysis, it appears as a distinct dimension of existence, a domain rich in manifestations of consciousness. The state of hypnosis is an expressive space where one can observe elements of reality, dreams, the psyche and the mental and physical state, from the emotional to the limits of the imagination and hallucination. In the framework of analytical work, these qualities make hypnosis both a crossroads for the study of the human sciences and an important space for observation and therapeutic action. As a space, as a site, it is only an open terrain for the application of "theories of treatment" and not a therapy in itself. It is for this reason that certain therapies have been born from hypnosis. Conversely, it is logical that the therapies derived in this manner should be applicable within that special space known as the "state of hypnosis." It is therefore easy to understand that hypnotherapy can by definition only be applied by combining the state of hypnosis with theoretical principles drawn from theories such as behaviourism, psychoanalysis, communication, or neuro-linguistic programming.

A certain number of ideas, assumed to be known and accepted, will not be discussed here but simply mentioned:

- 1. Hypnosis is a state of consciousness, a relational mode, not a theory.
- 2. Hypnosis as conceived in the nineteenth century was a simple and direct technique, reductionist both on the level of its application and the obtained effect.

Requests for reprints should be sent to Edouard Collot, Director, Medical Department, French Hypnosis Institute, 97 rue Hoche, 78800 Houilles, France.

- 3. Numerous theoretical models building on the descriptions of Pierre Janet permit hypnosis to be viewed today as a specific state of consciousness, as a particular mode of mental and psychological activity originating from a "disassociation" of consciousness.
- 4. The clinical approach falls within the fields of medicine and psychology. For example, the words "consciousness" and "primal" will be used here as they are defined by ordinary language and standard dictionaries.
- 5. We view psychoanalysis as a theoretical tool describing in its own manner the operation of the psychological apparatus on one hand, and as a psychotherapy on the other hand. Numerous concepts described by psychoanalysis have been confirmed by other, completely different, approaches. This can allow us to assert the universality of such concepts as descriptions of psychological functioning (the Oedipus complex is one example).
- 6. The theoretical tool of reflection used to analyse the results of a hypnotherapy of a given type will be identical to that used in the theoretical frame of reference, although certain distinctive features will appear. It is in this sense that there exists a post-analytical hypnotherapy, which we will call hypnoanalysis, in which the widening of the frame of reference allows the introduction of psychoanalytic practice and references, and their association with the hypnotic state.
- 7. According to the most recent data drawn from the evaluation of various psychotherapies (the World Congress of Psychotherapists in Phoenix), there is no basis to conclude that any particular model of psychotherapy provides superior results. Rather, the congress concluded that results varied according to clinical indications, as well as the personalities of, and the dynamic relational structure between, the patients and the therapists. It is in this spirit of openness and research that our work is done, the different varieties of hypnotherapy being only a few possibilities among many others to permit a patient to open himself towards the world, first through a process of treatment and then through a process of personal development.

The Method

The following work originates from the hypnopsychotherapeutic method, a technique described here in broad outline. Hypnopsychotherapy, which I will refer to as "hypnoanalysis," can be defined as a psychoanalytic therapy which is carried out under hypnosis at certain moments. In practice, after a period of initiation, the use of the technique of free association is proposed to the patient.

The state of hypnosis discussed here can be defined as a state of modified consciousness in the sense that the subject displays a vague state of awareness, principally characterised by the phenomenon of dissociation.

The central value of this technique lies in the subject's increased ability to explore the layers of consciousness which are usually accessible in classic analysis only after much longer periods. In addition, the accompanying

emotional manifestations appear to be simultaneously facilitated and rendered more profound.

In the large majority of cases, the hypnotic trance of a subject evolves in the course of the sessions: the light state of hypnosis in the first sessions deepens as the therapy continues, without any modification in the technique applied at the outset. This phenomenon often reverses itself at the end of the psychotherapy; the subject emerges progressively and spontaneously from hypnosis. In our experience, such developments are associated with the positive results of the treatment; subjects enter the state of hypnosis more easily when they feel less threatened by their problems.

This evolution continues in the most successful cases until the subject masters the state of hypnosis and becomes autonomous, meaning that he/she feels free to explore alone the different states of consciousness, perhaps for pleasure.

I would add that the factors which hinder the entry of the subject into the state of modified consciousness fall into two main categories. Some are associated with the patient, such as his/her perception of hypnosis and unconscious problems, but others are linked to the attitude of the therapist and can spring from an excessively peremptory initiation or the problem of the power associated with the therapist's role. During this evolution, there exist two fairly common phases as regards communication.

TWO SPECIFIC STATES OF COMMUNICATION

Before examining these different levels of communication, it must be specified that they could not serve as subjects for study outside of the transferential context which gives them their meaning. Furthermore, although the didactic approach requires us to separate them, these two levels of communication necessarily overlap and interact.

It is important to consider that the transferential (and counter-transferential) relationship follows (or precedes) this movement in the regression of the subject. This transfer, described as narcissistic (Palaci, 1991) in that it is believed to activate the primary process of mental operation, is thought to provoke a cleavage of the self leading to a fusional relationship, a precocious object relationship. We are close to a relationship of the type which exists between the mother and the unweaned infant (cf. the work of Bowlby), resulting in the appearance of phenomena of prelinguistic communication. As we will see later, these phenomena are only controllable and interpretable "through" and "by" transfer in the sense that the state of being of the patient requires that the therapist assume a state which is at once equivalent (being on the same level of communication) and distinct (another level of communication which provides the necessary perspective for the "logical" processing of the information by the therapist).

The first of these levels of communication is the most common and is present as soon as we use language. Although the quality of the material remains identical to what it would have been in a framework of classical

analysis, a particular characteristic which accompanies the hypnotic trance is the increased implication of the patient in the process of communication. When the subject's defences are confronted by the threat of the emergence of suppressed material, they may adapt to this new situation and reinforce themselves. As a result, resistances are created which prevent the patient from entering the state of hypnosis. For this reason, allowing the patient to achieve hypnosis through the analysis of his/her own resistance to the transfer represents a first therapeutic step in itself. The increased implication of the subject can emerge either from the outset or else progressively. Among its consequences is an increased ability on the part of the subject to describe his/her experience; the evocation becomes more accurate, more effortless, bringing with it a great wealth of information relative to the subject's personality, his/her dynamic of exchange and problems. The recollection facilitated by the double movement of explicit and implicit regression allows the subject to discover, through a mechanism of unconscious associations, the most important biographical elements regarding his/her problems. At this level, there is no modification of the process of elaboration and interpretation.

In the second level, the subject communicates through an imaginary mode which is much more regressive. The signified as well as the affect are expressed more directly, often through physical expression. The subject's statements may take a distinctive turn, characterised by imaginary evocations which resemble dreams in their content and their structure. On the surface, there is no link between these statements on the one hand and the personality and problems of the subject on the other. These imaginary statements are expressed in more or less primal fashion, varying across a spectrum from the most concrete to the most abstract, extending to the point where the mode of expression becomes physical and emotional.

We would like now to deal in particular with this second level of communication. It appears doubly worthy of attention since it is specific to hypnosis and modified states of consciousness, and since it has never been explored in relation to post-analytical clinical hypnosis.

THE METAPHOR AND THE ANALYSIS

We will need to make a detour by way of reality and duplicate reality, taking inspiration from the essay Le réel et son double by Clement Rosset (1984).

Our capacities of observation and faculties of discernment, being selective, imperfect and complacent, present us with an impression of reality which is often illusory. This becomes increasingly true the more we allow ourselves to deny the perception of a reality as soon as it becomes unpleasant. We know how to protect ourselves from a reality which is too insistent (and which will re-emerge in another form): temporary distancing in the case of repression as described by Freud and concealment in the case of repudiation described by Lacan. Simply put, no one is blinder than he who does not want to see,

who accepts the perceived object but rejects the consequences which should follow. In such a case, there is a "useless perception," with as its consequence a denial which appears to be one of the remarkable characteristics of the illusion. The subject suffering from an illusion is attentive to his fantasies and desires. Such a subject is much more ill than the neurotic; he is incurable. This blind person is incurable not of blindness but of seeing. Any effort to point out the problem or to reprimand him would be in vain. The neurotic subject could return to reality thanks to a re-emergence of repressed experiences if he is victim of repression or repudiation. But what is the fate of the illusioned subject (who, let us note, for it is important, may also be the victim of a neurosis?).

He is led to develop the art of accurate perception but to misjudge the consequences resulting from this perception. In other words, he is incapable of understanding the essential link between "I think" and "I am" in "Cogito ergo sum." The illusion finally creates a "duplicate" reality in the sense that there is a similarity of structure between the illusion and the duplicate.

While the theme of duplicate reality is often associated with cases of psychotic split personalities, it does not concern only the limits of normality but also an infinitely more vast cultural space; the oracular illusion linked to Greek tragedy, the metaphysical illusion inherent in philosophies which take their inspiration from idealism, etc.

It may be useful here to take the example of one of Aesop's fables evoking the problem of duplicate reality, just as we could have taken the example of Oedipus as recounted by Sophocles or any one of numerous Sufi tales. in order to define the meaning of the oracular structure. Aesop's fable. "The Son and the Lion", is quoted from Chambry's (1982) translation:

A timid old man had a courageous only son who had a passion for hunting. In a dream, he saw his son killed by a lion. Fearing that the dream was a prophecy which would be fulfilled, he built a magnificent apartment high above the ground to protect his son and kept him there. To amuse his son, the old man had had paintings made of all sorts of animals, including a lion. But the sight of these paintings only increased the young man's boredom, One day, approaching the painting of the lion, he shouted "You cursed animal, it is because of you and the lying dream of my father that I have been shut up in this woman's prison. How can I revenge myself on you?" With these words, he struck the wall with his hand so as to gouge out the lion's eye. But a nail pierced his flesh beneath his fingernail, causing him a sharp pain which developed into an inflammation and then into a tumor. He died of the resulting fever not long afterwards. The lion, although it was only a painted lion, nonetheless killed the young man in spite of his father's useless efforts.

Two meanings can be drawn from the analysis of this fable. The most obvious is certainly that no one can escape his or her destiny, which can otherwise be defined as reality or as the totality of the events of existence. Confronted by a ruse, destiny responds by using the same deception as the very means by which it achieves its end. But the other meaning, the one

which interests us, is that the very act of attempting to avoid destiny leads to its fulfilment. If destiny is reality, then it is the attempt to escape it which is deceit, as in the fable where the destiny is death. The oracular structure reveals the reality situated on the side of the illusion, of the duplicate.

In another manner, the structure of reality according to Lacan (1971) refers to the inability of reality to be aware of itself; the "signifier" is by its nature nothing more than a symbol of an absence. In each case, the meaning is exactly what is provided not by itself but by the other. For Hegel, it is the sensitive other which explains sensitivity, for Lacan it is another penis, or phallus, which gives meaning to the penis.

In Lacan's seminar on The Purloined Letter, reality is only significant because it is missing from its place, just as in the oracular event where the event is only anticipated to the degree that it represents something else. From this illusion originates the duplicate reality. The duplicate of the subject is another reality of the subject, often better than the reality itself. It can appear as a sort of immortal entity in relation to the mortality of the subject. What is important is that the reality is not on the side of the subject but on the side of the double, of the "ghost." It is for this reason that the mirror is deceptive and provides false information, because it only shows the opposite of reality. Uniqueness thus does not exist, whether it is a question of the self, of the here, or of the now which is not only now. The illusion should therefore always provide a magical duplication of the subject, whether directly or indirectly. However, the "illusion of the senses" obviously has no link with the refusal of reality and its duplication. Is it necessary to follow Freud regarding the "future of an illusion" which links the illusion to desire rather than to error?

THE ILLUSION, THE DUPLICATE AND THE METAPHOR

Regarding personality changes during artificial sleepwalking, Pierre Janet (1973) writes: "Sleepwalking is a second existence which has no other characteristic except that it is the second." Janet thus shows that there is nothing supernatural or inexplicable in artificial sleepwalking. Instead, there are two modes of existence in life resulting from a process of dissociation which is believed to regroup certain characteristics of the psychological functioning of the subject at a particular moment, called a "state of hypnosis." In another way, it is possible to link this "second existence" to the problem of the duplicate. Would the subject under hypnosis not be living somewhere between illusion and reality, with reality perhaps being closer to hypnosis in its psychological manifestations?

Is the metaphor in hypnosis not the representation of the double? The double and the metaphor present a structural analogy originating in the illusion, which, as we have already seen, can originate from several sources. The first is the interpretation of reality by our senses and our beliefs which means that each of us suffers from illusions, with reality always being elsewhere. The second

is our inability to accept reality on a neurotic or psychotic level. In the second case, the double or the metaphor can take on the characteristics of delirium, to such a point that it is sometimes difficult to tell the difference between a product of hallucination or delirium.

The metaphor of the patient is the story of the patient in another semantic field, in an "elsewhere" constituted by illusion on the one hand and repression and repudiation on the other. It is a space of creation, of re-creation, but also of projections. The metaphor of the patient, that which is expressed spontaneously in a hypnotic state, is interesting in the degree to which it represents the signified reality of the patient, or his supra-reality.

In the following clinical examples, I wish to show on the one hand how therapy carried out during the state of hypnosis allows the patient to have access with extraordinary speed to primal material through a mode of communication which is also primal. On the other hand, I wish to show how the patient's metaphor, for example, of a "previous life," represents a level of reality into which the therapist can integrate himself and carry out his work, and in which he is eventually placed in transferential representation.

CASE STUDY

This comprises an account of the first meeting and of the first hypnosis session which followed.

Background Session

Veronique is a 28-year-old native of a large city in northern France. She came to Paris around the age of 19 to continue her studies. Her parents are both alive and have been separated for the past two and half years. Her older brother, three years her senior, is married and has an infant child. In Paris, she shared a studio apartment with a male student whom she had met in high school. Their relationship ended shortly after she met her current husband. She has never lived alone and says that she feels completely incapable of doing so. After graduating from a business school, she entered the field of communications and marketing in the food sector. She is not content with her present employment and would prefer to work in human resources, training or recruitment. She has been married for three years to her husband, whom she met five years ago when he was teaching in the business school where she was studying. Her husband, 42, worked at the time as the director of a clinic and is currently employed in management training. The couple's principal conflict centres around her desire to have a child, while he says he does not want one. She says that they had tried in the past but without success. Medical exams showed no physical problem preventing conception, but she complains that their sexual relations are too infrequent, at the rate of one a month.

She currently lives with another man, 35, who works in adviser training. He is in the process of a divorce and has a five-year-old son. Her husband is convinced that she will return, and she feels guilty for leaving him.

She wishes to begin therapy because she feels disoriented between these two men.

First Hypnosis Session, One Week Later

The session takes place on the couch, with the following introduction:

Become conscious of the space which surrounds you... Little by little the sounds around you move farther away...farther away... You feel comfortable... Your attention is concentrated more and more on the interior space of your body... You feel pleasant sensations... more and more comfortable... The outside draws away... You simply let the sensations wash over you... the images... the impressions.

A pause of several minutes follows.

Suddenly her entire body convulses, her face contracts, her skin turns a deep, dark red, her face becomes even more tense and turns almost blue. She begins to weep with the cries of a small girl, sobbing uncontrollably.

I intervene for the first time to reassure her and help her to express what she seems to be experiencing. She can barely speak. "I'm pushing...I'm pushing...I'm shut in...[sobs] It's my mother...She doesn't want me." A long time passes, several minutes during which she suffers intensely, then she continues: "My father is next to me, I feel it, I can barely speak." I say, "Your father loves you!" "Yes," she answers. She relaxes slightly and her symptoms of pain disappear. End of the hypnosis.

Gradually, she returns to reality. Later, she explains that while she was under hypnosis it suddenly became dark around her. She said that she felt as if she was dying and experienced intense anguish. She had the sensation that she was pushing to stay alive and that her mother was all around her.

She then associates her experience with the memory of two of her siblings who died shortly before she was born. The first died at the age of a year and a half while the second was stillborn. She thinks that he was unable to breathe because he was deformed. Then she talks about her mother: "I could never stand having her touch me, even today. I have no memories with her."

As she is leaving at the end of the session, she says with surprise "I can't understand it. All that has nothing to do with what I told you the last time."

COMMENTS

The first question which comes to mind is whether the information which emerged during the session is a mere memory or can be described as a metaphor. There is no metaphor in the strict sense of the word, because no semantic change occurs: the patient recounts her experience. However, if we ask ourselves which experience is being recounted, we see that it is impossible to answer

directly. There exists a metaphor because there is a representation of an indistinct set of memories, or even of an imaginary construction justifying the emotional manifestations, and which does not necessarily have any significance at the level of reality, but which finds its meaning at the level of the duplicate reality.

The metaphor is expressed both linguistically and physically, and the immediate transfer which follows falls into this metaphorical space.

This case perfectly illustrates how the state of hypnosis allows the patient to relive with emotion the subconscious system from which emerges a group of traumatic memories. This sentiment, this experience of having to fight for her life against smothering, could well be linked to the anguish felt by the mother following this third pregnancy and communicated to the patient from her earliest days. Perhaps, but not exclusively; rejection and a lack of affection are also present. It is in any case a process of transformation of a group of experiences into metaphors. It is usually remarked that such cases of emergence of past experiences concern not a single memory but a group of memories clustered together around a unified group of themes, reduced to a single general theme and attached to a memory which serves as a common point of reference. In contrast, the emotions associated with these memories do not seem to group together but rather to combine into a single emotional charge. This may explain the manifestation of a very strong emotion which is sometimes observed without the presence of corresponding memories (Grof. 1983).

The patient appears to use the immediate transfer as a motor to "propel" herself across this ocean of trauma. This transfer allows her to experience the situation with the presence of a father, who is present in the metaphor. The father feels the need to respond to the appeal, and by doing so intervenes directly (in this case without having been previously present).

The level of representation is very primal, and a part of the anguish can only be represented through a physical experience. This is confirmed by the fact that the patient indicates during the session that she is incapable of speaking, because there is no way to put the experience into words. This strange characteristic of metaphorical communication is repeated in a counter-transfer experienced on the same level; the therapist feels the suffering in a way which cannot be expressed. It is because this suffering is perceived on a very primal level that it triggers the answer to the unasked question, first on the unconscious level and then on the conscious level. This process may then permit the introjection, the incorporation of a "good" object.

On the level of reality, one of the implicit questions during the first meeting with Veronique was that of sterility. As in the majority of psychosomatic problems, the question is asked in physical terms and no link is made between the symptom and the role of affection (Marty, 1990).

The non-recognition of this link can go so far as to cause iatrogenic secondary effects, due to the request for physical treatment from the patient on the one hand, and on the other hand the frequent non-recognition on the part

of the medical profession of the link between the psychological condition and the physical state.

In Veronique's case, if the father-therapist helps her to "emerge from the mother," she can finally be born, freeing herself at last from the fear of death. As regards her sentimental life, she will finally be able to seek a father for her children who will not play the role of her own father, but who will instead be her companion. Furthermore, her current psychologically generated sterility could quite well be cured by itself without any other form of realisation or interpretation.

Hypnosis appears in this type of case and used in a therapeutic framework as a privileged space for the emergence of psychosomatic links.

REFERENCES

Aesop (1982). "Fable 295". In E. Chambry (trans.) Paris: Les Bettes Lettres.

Grof, S. (1983), Royaumes de l'Inconscient Humain, Monaco: Rocher,

Janet, P. (1973). l'automisme psychologique. Paris: Société Pierre Janet.

Lacan, J. (1971). Ecrits. Paris: Seuil.

Marty, P. (1990). La psychologie de l'adulte. Paris: Presses Universitaires de France.

Palaci, J. (1991). La suggestion: Hypnose, influence, trance. In Les empecheurs de penser en ronde. Paris: Laboritoires Delagrange.

Rosset, C. (1984). Le réel et son double. Paris: Gallimard.

BROADENING THE CLINICAL USE OF HYPNOTIC TECHNIQUES

Lorna D. Channon-Little and Jennifer R. Flatt

University of Sydney

The paper describes a way in which techniques developed for use in treating one problem may be used in the treatment of others. Specifically, it describes the use of pain-control techniques in anxiety and the interchangeability of techniques between various habit disorders.

When faced with a new problem in patients' symptoms, it is always tempting to reach for a hypnosis "recipe book" like the invaluable Hartland (1971) or Hammond (1990), look up the presenting complaint in the index and try out the techniques suggested. While there is absolutely nothing intrinsically wrong with this approach, it has certain limitations: Most patients are not satisfactorily treated by one single technique; patients vary in their capacity to become involved in different kinds of hypnotic experience; practitioners find some techniques more in tune than others with their clinical style.

One can get over these limitations surprisingly often by generalising congenial techniques from one complaint to another. This paper presents several examples of such generalisations across diagnostic categories.

THE USE OF TECHNIQUES OF PAIN CONTROL IN ANXIETY SYMPTOMS

Many pain control techniques make excellent use of imagery. Patients may be asked in hypnosis to visualise different intensities of pain as having different colours and to change the present pain colour to one of a lower intensity (Hilgard & Hilgard, 1983). They may be asked to rate the intensity of pain in terms of a numerical scale and, in hypnosis, to reduce the number of the pain experienced (Barber, 1982). A rather different technique is to imagine

This paper was presented at the Annual Congress of the Australian Society of Hypnosis, Tasmania, 23-30 August 1987.

Requests for reprints should be sent to Lorna D. Channon-Little, Department of Behavioural Sciences in Medicine, University of Sydney, NSW 2006, Australia.

that the pain has moved from its actual site to another, more bearable location (Hilgard & Hilgard, 1983).

Some patients who suffer from crippling anxiety can benefit from the application of these pain control techniques to their experiences of anxiety, as the following case illustrates.

CASE 1: MR A

Mr A was a 32-year-old solicitor who presented with a long-standing, quite severe but very specific anxiety problem. He was highly anxious whenever in a social setting with a woman he found attractive, and "completely froze" if he was alone with such a woman. He was extremely competent, well-regarded, and confident in practising his branch of the law, which involved contact mostly with other men, but also with professional women. He found that the fact that they were interacting in a professional capacity and within professional roles made his contact with these women no more than a little uncomfortable. He saw them as, in some sense, "honorary men."

Mr A had dated women, but said that this was "always disastrous." In adolescence and at university he said he had been extremely attracted to particular girls and women, had masturbatory and other fantasies about them, but in most cases had never approached them for individual outings. In most cases, women he had dated had approached him. Some of these women had also initiated sexual contact. He said that he did not have erectile difficulties in these circumstances, but reverted to high anxiety when the sexual contact ended.

In his work role, Mr A was required to make regular appearances in court, where his verbal performance in representing his corporate clients was crucial. He often became somewhat anxious before these court appearances (a SUDS rating of 4 on a 10-point scale) but had already arrived at a Yerkes-Dodsonian (1908) understanding of this: His anxiety enhanced his performance.

There were strong cognitive elements to Mr A's dilemma. There was also a particular physical sensation of anxiety — a tightness in the throat that made it difficult to speak — whenever Mr A was alone with a desirable woman. Clinical intervention focused on both of these elements, but only the second is relevant in the present context.

In hypnosis, Mr A was asked to recall a particular recent occasion when he had "seized up" while in a restaurant with a woman he found very attractive (indeed, his attraction for this particular woman had provided the impetus for his presentation for therapy). Some time was spent constructing the scene in hypnosis, involving the use of all six senses (kinaesthesia being the sixth). Mr A was then asked to locate and describe the physical sensation of anxiety, and said that it was in his throat, and a "hot, tight feeling." He was asked if the feeling was associated with a particular colour, and immediately said "red, it's bright, pillarbox red." He was asked to describe the shape and texture of the feeling, and said that it was a ring shape, with a smooth, hard texture.

25

He was then told that if he concentrated on the sensation in his throat while also breathing in a slow, relaxed way, something interesting would happen. He would find that he was able to transform the colour, slowly, with each breath from bright red to a deep, dark red, then becoming purple, then moving out into dark blue and finally a soothing, comfortable light blue. He achieved the colour transformation with ease, and was then again asked to describe the shape and texture of the sensation. He replied, with some surprise, that he was no longer sure of the shape and texture. It felt as if there was still something there, but it was soft, amorphous, ever-changing.

Capitalising on Orne's (1959) concept of "trance logic," Mr A was told that, because the sensation in his throat was no longer red and hard, he would be able to move it around his body. Why not - "just to try it out" - move the sensation down into one of his arms, just moving it along a bit further with each outward breath? He smiled, seemed very relaxed, and reported on the progress of the sensation as he moved it down to the base of his neck, whereupon it split in two and progressed down each arm until it was residing in his fingertips. He reported that he was quite sure that, if he opened his eyes, he would see these light blue deposits in the end of each of his eight fingers, while his thumbs would be their usual pink hue. Why not then, since the light blue sensation was all congregated there, just open those little hatches at the end of each finger and let it escape from his body entirely? He smiled again, and his fingers stretched out on the arm of the chair as the sensation was liberated from them. Finally, Mr A was returned to the restaurant scene to rehearse a future dinner with the same woman, at which he would feel only a little anxiety, enough to make him really enjoy the evening.

There were several elements to the intervention with Mr A and it is likely that all elements played a role in the resolution of his difficulty. However, the role of the transformation techniques borrowed from pain management was apparent when he called, delighted, some six months after treatment to tell me that he was "in love." The woman in question was not the one who had triggered his presentation to me, but someone he had known for some time on a professional basis. He said that his improved cognitive habits had enabled him to make the initial approach to this woman and invite her out for dinner. Once in the restaurant on this first date, he had felt again the tight, hot sensation in his throat but instead of, as before, responding with helplessness and resignation, he had retired to the men's room, where he sat quietly for a few minutes and transformed the sensation, finally "liberating" it from his fingertips and then returning to enjoy the evening. On subsequent outings the sensation had not been so strong and he had been able to effect the transformation without withdrawing from the situation. At the time of his call, after two months of regular contact with this woman, he no longer felt any anxiety with her and, for the first time in his life, developed an intimate. ongoing relationship with an adult woman.

THE INTERCHANGEABILITY OF TECHNIQUES USED IN HABIT DISORDERS

The similarities between substance-abuse such as drug-dependence, alcohol abuse and smoking, are relatively obvious. Recently, parallels have been drawn between other problem areas and substance-abuse disorders, notably between anorexia nervosa (Szmukler & Tantam, 1984) and bulimia (Channon, 1987) and alcohol abuse. The similarities between what might loosely be termed "habit disorders" leads one to think immediately of the possibility of transferring techniques designed for one problem to other diagnostic categories.

Spiegel and Spiegel's (1978) techniques for stopping smoking focus on increasing the smoker's respect for his or her body. In hypnosis, three major points are suggested to the patient, who is to use them later in a state of "meditation" or self-hypnosis: Smoking is a poison for your body; you need your body to live; you owe your body respect and protection.

The idea of enhancing body respect applies to many habit disorders where patients are on bad terms with their bodies. Anorexic and bulimic patients often have a preoccupation with weight as a basis of self-esteem and are usually dissatisfied with their bodies' current appearance. Bulimics who induce vomiting are commonly aware of some of the physical damage they are causing, such as oesophageal bleeding and tooth enamel erosion, and feel guilty about it. Obese patients are made painfully aware that their body shape is not in tune with current rather unrealistic ideals about the importance of thinness, especially for women (Garner, Garfinkel, & Olmsted, 1983).

If one expands a little of the Spiegels' technique and includes a further component, that of enjoying bodily sensations, the technique can be used with sexually inhibited patients, who tend to cut themselves off from sexual experience.

The following case history describes the use of this expanded Spiegel technique with a patient whose difficulties include a long history of anorexia nervosa and a current drinking problem.

CASE 2: MS B

Ms B, a 32-year-old self-employed, single woman described herself as a "failed anorexic." She was 5 feet 7 inches tall (like us, she does not think in metric units!). When asked to step on the scales, she made the therapist (LDC) promise not to tell her the weight she registered, which was 7½ stone. Currently, she had a perceived problem with alcohol. If she was to stay at home at night she would buy at least one bottle of wine and drink it all. Her offered contract ran, "I'll stop drinking if you'll help me lose weight." A mutually acceptable negotiated alternative ran more on the lines, "We'll both work on cutting down on the drinking and eating in a healthy way."

The modified Spiegel technique involved the idea that alcohol poisoned her body, she needed her body to live, and she owed her body respect and protection. In addition, she was asked in hypnosis to imagine taking a shower and to enjoy the silky feeling of soap on her skin, to enjoy the scent of expensive soap, the tingle of the water, and so on. She was told that her body was good because it could give her these pleasurable feelings. Out of hypnosis she was given homework — walk right past the liquor store that evening and spend the money she had saved on very expensive soap for that evening's shower.

The outcome was a (reported) reduction in alcohol intake, a small weight loss, and the expression of much greater satisfaction with her body image.

THE USE OF TECHNIQUES FOR ANXIETY REDUCTION IN WORKING WITH ANGER

There are many situations where anger — feeling anger and expressing it — is counterproductive. Many patients are helped by techniques to control and diffuse these feelings. Certainly, we would not want to appear as radical behaviourists here. Situational anger control needs to be taught in parallel with proper explorations of the causes of anger, ventilation of feelings, and in many cases psychodynamically oriented working through of anger-generating material. Nonetheless, there is a place for immediate, specific, symptomatic treatment.

Walker (1986) described her technique of encouraging patients to feel emotions more intensely and vividly in hypnosis and demonstrating their ability to change and control affect. This is a creative and valuable process, but there are some patients for whom it is perhaps contra-indicated, when the physical concomitants of anger may be deleterious. For example, a 28-year-old female patient had a long history of extreme physical and psychological abuse by her mother. While it has been shown to be positively therapeutic to provoke asthma attacks in hypnosis and allow the patient to practise new patterns of control (Ewer & Bushnell, 1985), it must be noted that Ewer, the senior author, is a respiratory physician who specialises in the treatment of asthma. Dealing with a full-blown asthma attack is probably outside the competence of most non-physicians and an experience to be avoided if possible. For patients such as this and the one described in Case 3, techniques of choice are those which teach anger control without actually involving the production of anger.

Read through a selection of techniques for tension reduction (e.g. Channon, 1987; Dawes, 1987; Venn, 1984), substitute the word "anger" for "tension" and the phrase "let the anger go" for "relax," and you immediately have a selection of suitable scripts.

CASE 3: MRS T

Mrs T, age 35, was referred by her general practitioner, who was treating her for hypertension. Her symptoms included chest pain and headache when

she became angry. During the previous two years she had been uncharacteristically prone to losing her temper, which triggered her asthma symptoms. Her general practitioner had taken blood pressure readings in various situations and found considerable fluctuation, with major elevations coinciding with Mrs T's subjective experience of anger and irritation.

Exploratory psychotherapy revealed a long-seated difficult relationship with Mrs T's father and some projection of angry feelings on to her husband. These feelings were ventilated and worked through gradually, in parallel with training with symptomatic anger control.

In the first session, eye fixation and progressive relaxation were used to induce and deepen hypnosis. During progressive relaxation, Mrs T was instructed to let her shoulders drop and to feel the tension flowing out of her body as she did so. Later she was given the same instruction, but this time told that, if she were angry, she would be able to feel the anger flowing away, just as the tension had done, flowing away as her shoulders dropped and she let her anger go on three relaxing breaths. Although she felt a little reluctant to carry this out in public, Mrs T reported that no-one ever noticed what she was doing. Using this technique in the immediate situation of anger and irritation, and with exploratory therapeutic work, she reported a disappearance of chest pain and headaches.

CONCLUSION

You will realise the advantages of using hypnotic techniques across diagnostic categories as soon as you try it. It widens the variety of techniques available for any individual patient, so that you can find a technique which is congenial to the patient or, in the case of a patient who needs longer term therapy, avoid the boredom of repetition for both of you. As a therapist, you can use techniques which you know and with which you are comfortable. And, last, it makes you feel creative. A therapist who is just repeating formulae is not going to derive as much excitement and satisfaction from working with clients as one who feels innovative and has some sense of personal involvement.

REFERENCES

- Barber, J. (1982). Incorporating hypnosis in the management of chronic pain. In J. Barber & C. Adrian (Eds.), *Psychological approaches in the management of pain* (pp. 40-59). New York: Brunner/Mazel.
- Channon, L. D. (1987). Relaxation techniques: Alternatives to progressive relaxation. Australian Journal of Clinical and Experimental Hypnosis, 15, 47-51.
- Dawes, K. (1987). A relaxation technique for agitated clients. Australian Journal of Clinical and Experimental Hypnosis, 15, 58-60.
- Ewer, T., & Bushnell, J. (1985, August). A controlled trial of a programme involving hypnosis in the treatment of chronic asthma. Paper presented at the annual conference of the Australian Society of Hypnosis, Christchurch, New Zealand.

- Garner, D. M., Garfinkel, P. E., & Olmsted, M. P. (1983). An overview of the sociocultural factors in the development of anorexia nervosa. In P. L. Darby, P. E. Garfinkel, D. M. Garner, & D. V. Coscina (Eds.), Anorexia nervosa: Recent developments (pp. 65-82). New York: Alan R. Liss.
- Hammond, D. C. (1990). A handbook of hypnotic suggestions and metaphors. New York: W. W. Norton.
- Hartland, J. (1971). Medical and dental hypnosis and its clinical applications (2nd ed.). London: Baillier-Tindall.
- Hilgard, E. R., & Hilgard, J. R. (1983). Hypnosis in the relief of pain (rev. ed.). Los Altos, CA: William Kaufmann.
- Orne, M. T. (1959). The nature of hypnosis: Artifact and essence. *Journal of Abnormal and Social Psychology*, 58, 277-299.
- Spiegel, H., & Spiegel, D. (1978). Trance and treatment: Clinical uses of hypnosis. New York: Basic Books.
- Szmukler, G. L., & Tantam, D. (1984). Anorexia nervosa: Starvation dependence. British Journal of Medical Psychology, 57, 303-310.
- Venn, J. (1984). The spiral technique of hypnotic induction. *International Journal of Clinical and Experimental Hypnosis*, 32, 287-289.
- Walker, W.-L. (1986, February). The use of hypnosis to facilitate emotional expression and control. Paper presented at the New South Wales branch of the Australian Society of Hypnosis.
- Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of Lakit-formation. Journal of Comparative Neurology of Psychology, 18, 459– 482.