

## Hypnosis and the Evolution of Behavior Therapy

Joseph Wolpe

■ *Early in my career I was intrigued by the fact that under hypnosis bodily effects could be produced over which the subject had no control. But medical training took my interest in other directions. Later, I found a major role for hypnosis in the development of behavior therapy. Edmund Jacobson had found that anxieties could be counteracted and weakened by the simultaneous induction of the calmness produced by muscle relaxation. But this was very difficult to arrange in the context of real-life anxieties. The problem was solved by applying relaxation against hypnotically-induced anxiety-eliciting images. This was the origin of systematic desensitization.*

I am very glad to have this opportunity - the first I have ever had - to make formal acknowledgment of the role that hypnosis played in the development of systematic desensitization. Until now, I have only flatly stated that I made use of the "art of the hypnotist." I have never recounted what led to my finding in it an element vital to the full-fledged form of desensitization.

As a matter of background, I must tell you that when I was a medical student and later after I graduated, I was very interested in hypnosis and hypnotic phenomena. A focal point was the contribution of hypnosis to medical practice that stemmed from the discovery by Braid (1843/1899) that people could be anesthetized by suggestion so that in some cases even major surgery could be successfully performed.

My earliest introduction to hypnosis was associated with the strange charismatic figure of Anton Mesmer (1733-1815). I became quite absorbed with him and the story of his life, and finally felt considerable empathy and sadness for him because I thought he was unfairly judged. He was a very innovative person, and while he undoubtedly had a histrionic predisposition and used a dramatic setting for the therapy he used, he achieved beneficial results in many patients. I was upset about the devaluation of his work and the disparagement he received from the French commissions that sat in judgement of him. They derogated especially his theory of animal magnetism, but the value of the procedures he introduced is not diminished by the fact that his theory is

erroneous. He deserves special credit for two things. First, his was the first natural process theory of psychotherapeutic change ever advanced: there was nothing magical or supernatural about it in contrast to preexisting theories. Second, his procedures, despite their extravagance, were the forerunners of present day hypnotic practices.

As I mentioned, I had an interest in hypnosis when I was a medical student; and this led to my trying out some of its procedures on patients. I employed mainly suggestion and post-hypnotic suggestion. Sometimes the immediate results were notable, but I never achieved much in the way of lasting effects. And some experiences were discouraging. For example, I was consulted by the president of a major enterprise who had tried many kinds of programs for overcoming smoking. He said, "Nothing has worked for me. Can you hypnotize away my smoking habit?" First, I investigated the possible role of anxiety, but when this proved to be a blind alley, I used very strong post-hypnotic suggestions. For two weeks he abstained from smoking and then slowly resumed. I repeated my suggestions. This time, he stopped smoking for only one week, and the third time, my suggestions were effective for about 2 days.

After this and similar experiences, I turned away from hypnotic therapy and became interested in psychoanalysis. In April, 1942, I volunteered as a medical officer in the South African division of the British Army. A few months later, I was appointed to a base hospital in Kimberley that received soldiers from battle areas. At that time there was a treatment for war neuroses that was highly popular, called narcoanalysis, in which one gives the patient very slowly an intravenous injection of a barbiturate, Pen-tothal. This induces a drowsy state, during which one directs the patient's attention to the causal circumstances of his distress, and this elicits in him vivid images and verbalizations. There were four of us who were treating patients in this way. We were all at first very pleased at the idea that we were ostensibly doing a short-cut psychoanalysis, but it turned out that almost invariably the effects were short-lived. Narcoanalysis was no more successful than hypnosis.

So I began to wonder what else might be done. We knew that the Russians, who were our allies, did not believe in psychoanalysis, but we had no idea what treatment they actually used. I guessed that whatever they did probably had something to do with Pavlov; and for the next two years spent a great deal of time studying Pavlov's experiments and writing summaries and commentaries on them. What was of particular interest to me was his work on experimental neuroses - lasting anxiety states that he produced in animals, sometimes by unsolvable conflicts and sometimes by electric shocks to the feet.

Towards the end of the war, I approached the Professor of Psychiatry at Witwatersrand University, proposing to do experiments that might lead to an effective treatment of experimental neurosis. It turned out that these very strong, very persistent fears could in fact be progressively overcome by inhibiting a small amount of fear at a time. In the room where an animal had been shocked he would be extremely fearful. The fear would prevent his eating in that room even if he had been starved for several days.

Since it was anxiety that was preventing eating, it seemed reasonable to explore the possibility that if food were offered where anxiety was much less, eating might occur, and if it did occur it would weaken the anxiety. Well, that turned out to be the case, and eating in the presence of increasingly fearful situations led to the elimination of fear in every animal.

On returning to civilian life, I went on to treat the maladaptive fears of human adults. The first idea, of course, was to try feeding, but that turned out to be totally useless. Certain interpersonal anxieties could be overcome by the expression of legitimate annoyance - essentially what today is called assertiveness training; but fears of what other people think, and social anxieties in general were out of the orbit of this method. Now, a physician in Chicago, called Edmund Jacobson, had introduced a method called progressive relaxation. Through a lot of teaching and practice of muscle relaxation, people could learn to calm themselves. Jacobson used this calming to help people to overcome persistent anxiety states, with quite a good deal of success. I seized upon this idea and tried to make use of his method, but found it extremely cumbersome. Jacobson employed at least 50 training sessions and required an enormous amount of practice from the individual, and then there was still the question of how to bring the source of the fear into opposition with the calmness produced by muscle relaxation. It is very difficult to arrange this if one's sole resort is to fears arising in the life situation.

This problem brought to mind what I had learned in the context of hypnosis - the possibility of using imagination instead of reality. One can conjure up any situation that one needs and can thereby control the strength of the stimulus. I did two things. The first was to organize the patient's fears according to their strength - to parallel what had been done in the animal experiments. For example, if a person has fears of being at the center of attention of strangers, he will have less fear if there is just one stranger looking at him than if there are three or ten or forty. Accordingly, a list of interrelated imaginary situations were ranked according to the intensity of the fear. My second step was to hypnotize the person and make him relax by a modification of Jacobson's technique; and when he was very calm I had him imagine that he went into a room where he was observed by one stranger. With repetition the evoked anxiety eventually fell to zero. The procedure was then repeated with increasing numbers of strangers.

This was how standard desensitization originated. It is today the most widely used behavior therapy technique. Though it owed its development to my previous experience with hypnosis it turned out later on that for most cases it was not really necessary to use hypnosis. One could simply say, "Imagine so and so," without a formal hypnotic trance. Nevertheless, there are occasional cases in which it is a definite advantage to use hypnotic induction as a background for the systematic desensitization procedure.

## References

- Braid, J. (1899). *Neurypnology* (Braid on Hypnotism), ed. by A.E. Waite (George Redway). Original: *Neurypnology or, the rational of nervous sleep, considered in relation with animal magnetism*. London and Edinburgh: Churchill and Black, 1843.