SECOND EDITION

TRANCE STREATMENT Clinical Uses of Hypnosis

HERBERT SPIEGEL, M.D. DAVID SPIEGEL, M.D.

Trance and Treatment Clinical Uses of Hypnosis

Second Edition

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Herbert Spiegel, M.D.

David Spiegel, M.D.



Washington, DC London, England **Note:** The authors have worked to ensure that all information in this book is accurate at the time of publication and consistent with general psychiatric and medical standards, and that information concerning drug dosages, schedules, and routes of administration is accurate at the time of publication and consistent with standards set by the U.S. Food and Drug Administration and the general medical community. As medical research and practice continue to advance, however, therapeutic standards may change. Moreover, specific situations may require a specific therapeutic response not included in this book. For these reasons and because human and mechanical errors sometimes occur, we recommend that readers follow the advice of physicians directly involved in their care or the care of a member of their family.

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To our patients, students, teachers, and colleagues, who share with us the excitement of learning This page intentionally left blank

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Preface

A few weeks after Pearl Harbor, one of us (H.S.) was transformed from a psychiatric resident at St. Elizabeths Hospital in Washington, DC, into an Army psychiatrist at Ft. Meade, Maryland. Lewis B. Hill, my analyst at the time, introduced me to Professor Gustave Aschaffenburg, who gave me informal instructions on hypnosis that I found extremely useful in the Army, especially while in combat in North Africa. After returning to the States, the Army assigned me to teach at the School of Military Psychiatry at Mason General Hospital, where I was able to develop my interest and research in hypnosis.

A senior analyst advised me to be careful regarding this interest because it could "tarnish" my reputation as a serious psychiatrist and psychoanalyst. After all, Freud had abandoned hypnosis! When I resumed analytic supervision with Frieda Fromm-Reichmann, Harry Stack Sullivan, and Erich Fromm, I mentioned to Clara Thompson, my new analyst, that I was considering dropping my work with hypnosis. She obviously informed Frieda about this, because at my next supervisory session Frieda berated me for succumbing to such conventional thinking and wondered why I felt so fragile that I had to worry about such nonsense as being "tarnished." Furthermore, in her persuasive manner, she arranged in 1947 to have me give a seminar on hypnosis at the White Institute in New York, and she enrolled as the first student. To my surprise, she was fascinated by hypnotic phenomena, although she claimed that she herself did not feel comfortable using hypnosis in therapy.

One of the issues that emerged during our seminars dealt with the relationship between hypnotizability and mental illness. At that time, fresh from combat experience, I assumed that hypnotizability was a direct function of emotional stress and illness; for example, to be hypnotizable meant being psychologically weak or fragile. Frieda challenged this notion. She felt that although hypnotizability was *identified* in stressed persons, it could also be identified in secure, trusting, nonstressed, mentally healthy persons as well. She proposed that I expand my database to explore this proposal. At first, I dismissed this notion. After all, she admitted that she herself did not use

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hypnosis, whereas I did. But as my work continued, I did indeed learn that not only were secure and healthy people hypnotizable but that the severely mentally ill were not hypnotizable at all. Thus, as I gained more experience and knowledge over the years, I discovered that Frieda's insight in 1947 had been right, and I had been wrong.

This realization sparked interest in other issues, especially the need to find a practical clinical measurement for trance capacity. By the 1960s, experimental psychologists working in the laboratory had developed assessment tests, but these tests had serious shortcomings for clinical use. What I had in mind, on the other hand, was the aphorism "If you can measure it, it is science; everything else is poetry." The challenge was to develop a clinical measurement that could transform much of the rich body of clinical intuition, observations, and anecdotal data into more fruitful and systematic information.

I was further encouraged by pressure from students in the hypnosis courses (which I have conducted yearly since 1962) at Columbia University College of Physicians and Surgeons. This ultimately led to the development of the Hypnotic Induction Profile (HIP).

Once the assessment of trance capacity became possible, we were able to distinguish between trance capacity and treatment strategy. The ambiguous fusion of the two has been typical of most of the classical literature on hypnosis to date. Unfortunately, this fusion has also accounted for illusions of power on the part of many therapists using hypnosis. There are still some therapists who even today believe, overtly or covertly, that they have some God-given power to impose trance on others. Mesmer believed this more than 200 years ago, but modern therapists have learned a more appropriate humility.

The separation and the interaction between trance assessment and relevant treatment strategy emerged in my own thinking at the same time that my son and coauthor emerged as an inquiring student—he ultimately became a stimulating colleague. In the 15 years preceding the publication of the first edition of this book in 1978, we spent countless hours mulling over what has become the thesis of this book.

Except for the early development of the eye-roll and the HIP, I would, if pressed, find it impossible to separate with any clarity or fairness what is clearly his or my contribution. This work developed out of our dialectical relationship. One of the delights and rewards of being a father is to experience creative moments with a son. We have had many, and I hope we have more.

The other of us (D.S.) was fortunate enough to have had an inherited rather than an acquired exposure to hypnosis. I was profoundly influenced by watching and learning from my father's work with patients. The rapidity with which he established clinical rapport and the effectiveness of the brief therapy techniques along with the pleasure he derives from his work impressed me. During my medical and psychiatric training, I discovered that the use of hypnosis often counted among those rare times when I felt that what I had done made a real difference for the patient. The experience of helping a young asthmatic master her attacks and avoid hospitalization provided confirmation of my developing belief that the mind had an important role to play in the maintenance of health in the body. My existential orientation was tempered but not overwhelmed by the study of medicine.

I was greatly stimulated by attending the hypnosis course at Columbia University, first as a student and in later years as a teacher. The atmosphere of excitement, the predictability with which the unexpected happened, and the shared enthusiasm of teacher and students infected me. We have tried to capture some of this spirit in the written word.

We have been intrigued by hypnotic phenomena throughout our professional careers. Attempting to use hypnosis has enriched our clinical experience in both understanding and treating patients. This book has been written to make available to clinicians a brief, disciplined technique for mobilizing and learning from an individual's capacity to concentrate. In the past, there have been exaggerated fears about hypnosis and overblown statements of its efficacy. Our effort has been to bring scientific discipline to bear on the subject and to systematically explore its clinical use and limitations. The first rule of medicine is Do no harm. Those of us who intervene in the lives of others can best obey this rule by knowing our instruments well. We have written Trance and Treatment as an introduction for someone new to the subject of hypnosis, but we have also included material in sufficient depth so that therapists with wide experience in the field can acquire new perspectives. Our approach differs from the current clinical literature in emphasizing the importance of performing a systematic assessment of hypnotizability; our method is described in detail along with data relating performance on our HIP to personality style, psychopathology, and treatment outcome.

The book will have special interest for the psychiatrist, psychologist, and psychotherapist. It is also meant to be of use to physicians, dentists, and other clinicians who are interested in learning to use hypnotic techniques for problems such as pain control, habit control, and the differential diagnosis of functional from organic disease. We hope that our data are sufficiently systematic to provoke controversy and interest among scientific students of hypnosis.

Although immersed in a psychiatric tradition that carries considerable respect for objectivity and precise description, we describe human behavior phenomenologically as it relates to hypnosis in a probable rather than an absolute fashion. In this spirit, we present our experience with hypnosis in a clinical setting. We have not exhaustively reviewed the considerable literature in the field, although we have reviewed certain portions that seem particularly relevant to the important themes in the book. Where possible, we have applied statistical methods to test our hypotheses. Much of this work continues; at this stage, we are as much engaged in hypothesis generation as in hypothesis confirmation.

The realm of investigation encompassing hypnosis and psychological dysfunction is a comparatively new one. We are only beginning to see the results of studying trance capacity in relation to a variety of psychological and neurobiological dimensions. We look forward with particular excitement to the day when there will be greater convergence of knowledge regarding hypnosis and brain function.

It is now 25 years since we wrote the first edition of *Trance and Treatment*. Much has changed in medicine, psychiatry, and the field of hypnosis. We have used hypnosis with many more thousands of patients in this intervening time. We have added much learned from our experiences to this new edition of the book. Yet, we are glad to observe that the basic framework has stood the test of time. The fundamental concepts—understanding hypnotizability as a trait, routinely measuring this trait using the HIP in the clinical setting, teaching patients self-hypnosis, and using the principle of restructuring in conjunction with self-hypnosis—have worked well for us and for our patients during the past quarter century. We hope our students and readers will share this experience.

Herbert Spiegel David Spiegel

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> H.S. D.S.

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Prologue

Man is endowed with imagination as a compensation for what he is not, and a sense of humor as a consolation for what he is.

Oscar Wilde

The distinguished panel of French physicians and scientists who, at the behest of King Louis XVI, investigated and criticized the methods and theories of Mesmer came to the dismissive conclusion that hypnosis was "nothing but heated imagination." In many ways, they were right: Mesmer's theories of magnetic influence from one body to another were unsound and unsupported. Yet, imagination is a powerful thing-nothing to be trifled with. Hypnosis is a way to harness the imagination to therapeutic strategies designed to help people feel and live better, from reducing pain and anxiety to controlling habits and dissociation. It is difficult to capture in words all that the subjective experience with and objective evidence about hypnosis tell us. Indeed, much of hypnosis is a nonverbal experience. Typically, we respond to sensory input and manipulate words. In hypnosis, we do the opposite: We respond to words and manipulate images. Indeed, hypnosis allows us to get in touch with preverbal mental states that are at the base of our consciousness and information processing (Damasio 1999). King Louis's panel did note that human influence is a tremendous power-it is how "generals run armies, kings run countries, and parents raise children." Thus, even they conceded that the ability to influence another's imagination was a powerful thing, with tremendous therapeutic potential.

Nonetheless, the phenomenon of hypnosis is not easily described by the spoken or written word. The French philosopher Henri Bergson (1911) sardonically noted in *Creative Evolution*: "L'intelligence est caracteriseé par une incomprehension naturelle de la vie" ("Intellect is characterized by a natural inability to understand life"). In these few words, Bergson posed a fundamental problem faced by anyone attempting to study the human mind and human behavior: Our fixed concepts invariably distort what we study. Yet, the data available are so rich and diverse that some order must be imposed to make our perception of human behavior possible and, to some degree, more meaningful. Philosophically, we begin with a recognition that our undertaking is paradoxical; we cannot help but impose certain constructs on the phenomena we observe, yet we know that we are influencing and in some ways distorting what we study. We record and simplify our presumptions so that their impact can be evaluated. These problems of reconciling theory with empirical data have troubled philosophers for centuries. Several philosophical concepts that have been helpful to us are outlined in the following paragraphs.

Ortega y Gasset provides a valuable characterization of the dialectical interplay between the observer and that which is observed (Marias 1970). In a series of elegantly sweeping generalizations regarding the development of the theory of knowledge, he poses three metaphors of knowing. The first is "the seal which leaves its delicate imprint on the wax." In this *realist* or *empiricist* view, man's mind is the wax, reality is inherent in objects, and man approximates to it. Ortega y Gasset considers this metaphor unsatisfactory; objective reality is not so simple, nor is the observer so insignificant.

Emerging from the first is his second metaphor: "the container and its contents." In terms of this *idealist* metaphor, observed events are mere contents of the container that is ultimate reality. For something to be perceived, the container must be there; the structure of the container determines the reality of its contents. Ortega y Gasset then moves beyond this metaphor and thereby abandons both the realist and the idealist portions in favor of his third metaphor, the metaphor of light: "Man has a mission of clarity upon the earth." He is, in this way, suggesting an interplay between humans and their world. The act of shedding light is inseparable from what is observed. Truth and the act of exploration cannot be separated.

This third metaphor is consistent with our existential orientation. The relationship between the observer and that which is observed must never be taken for granted. Our approach is dialectical in that we emphasize the relationship between things rather than the things in themselves: hypnosis in the context of states of consciousness and hypnosis as a facilitator of a therapeutic strategy rather than as a treatment in itself. The dialectical frame of reference provides a perspective from which we can comprehend the significance of behavior that at first may seem contradictory. In this context, apparent paradoxes of thought and behavior become relevantly opposed. For example, it is as important to study what information the person in trance is ignoring as it is to describe the information to which he or she is paying attention.

Our thinking and the structure of our presentation are influenced by the existentialist and structuralist descendants of the philosopher Hegel. His emphasis on dialectics, a study of process and relatedness rather than objecthood, led to the existentialist emphasis on our capacity to relate to ourselves in an infinite variety of ways. Philosophers such as Kierkegaard, Heidegger, and Sartre emphasize the importance of choice in human experience. This approach is compatible with the hypnotic experience, which for many people becomes a lesson in alternative ways of relating to themselves and to their bodies. We have incorporated this emphasis on choice into our treatment strategy.

Structuralists such as Piaget and Lévi-Strauss emphasize the importance of studying the relationship between events rather than the events in themselves. We have borrowed from their approach in studying trance capacity—for example, we compare the characteristics of those high and low in hypnotizability rather than study trances as disparate events.

Hypnosis: Conceptions and Misconceptions

A particular problem confronts us as therapists in discussing the clinical uses of hypnosis. Hypnosis is commonly viewed as something *done to* a person, and it is widely considered a therapy. From our perspective, hypnosis is not in itself a therapy, yet it can facilitate a therapeutic strategy tremendously. Thus, it makes good sense to present hypnosis in the context of treatment, although in itself it is not a treatment. Furthermore, strictly speaking, hypnosis is not something done to a person; it is rather a state that can be evoked either alone or in the presence of others—in persons with the capacity for a certain style of concentration.

We present hypnosis not as an isolated phenomenon but in the context of its occurrence. One must examine alternate types of human consciousness to understand hypnosis; to make the best use

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of it in psychotherapy, one must consider alternate personality styles, diagnoses, and therapeutic strategies.

The following propositions are fundamental to our work:

- 1. The balance between focal and peripheral awareness is the fundamental parameter of the trance experience.
- 2. As an isolated phenomenon, hypnosis has no significant meaning. It attains significance only in relation to an individual's innate perceptive and cognitive capacities as they are used within the context of his or her environment.
- 3. Trance induction is a ceremony that facilitates a transformation from a customary to a special awareness.
- 4. Trance capacity, as measured by the Hypnotic Induction Profile (HIP), has a significant relationship to the total adult personality structure.
- 5. Except under special circumstances such as severe environmental stress, psychophysiological decompensation, and neurological deficit, an adult's style of transformation into the trance state (his or her trance capacity) tends to be stable over time.
- 6. Three overlapping characterological styles are related to the degree of trance capacity. Each style is composed of a cluster of distinctly identifiable, internally consistent cognitive and behavioral patterns. We identify these as Dionysian, Apollonian, and Odyssean.
- 7. The assessment of hypnotizability is a useful diagnostic aid that can facilitate the choice of an appropriate treatment modality along the entire spectrum of mental health and illness.
- 8. Hypnosis can facilitate and accelerate various primary treatment strategies.

We attempt to demonstrate, amplify, and apply these points to the clinical use of hypnosis. By way of perspective on the thoughts and data presented, we review briefly the "state of the art," first in clinical and experimental hypnosis, and then in psychiatry.

State of the Art

The literature on hypnosis is a fascinating amalgam of anecdotal assertions, mystical speculations, and extremely astute clinical observations. At the same time, there have been remarkable advances in the laboratory in applying disciplined investigative procedures from the behavioral sciences to the field of hypnosis. Unfortunately, comparatively little fruitful integration has occurred between clinicians and researchers, a situation sometimes referred to as a *cross sterilization* of disciplines.

A major problem in integrating clinical experience with the more disciplined but remote laboratory experience has been the absence of an adequate clinical probe (i.e., a means of assessing hypnotic capacity) that would be appropriate to the clinical setting. Measures such as the Stanford Hypnotic Susceptibility Scale (Weitzenhoffer and Hilgard 1959) the Harvard Group Scale of Hypnotic Susceptibility (Shor and Orne 1962), the Barber Suggestibility Scale (Barber and Glass 1962), and others were developed in the laboratory, usually using college student populations. These tests proved to be time consuming and were in some ways inappropriate to the atmosphere of urgency for problem resolution that typifies the clinical setting. A clinical probe was needed that would represent some of the discipline of the laboratory measures and would also be clinically appropriate.

This book is an effort to synthesize laboratory discipline and an appropriate respect for the observations and intuitive judgments of the clinician. It is hardly a final product, but it does represent an approach to making clinical experience with hypnosis more systematic by using measurements that have evolved during the past several decades.

During the late-twentieth century in the field of psychiatry, there appeared to be a tendency by therapists to use the treatment modality that they were trained to use without carefully scrutinizing the relevance of that treatment for a given patient. For example, therapists have gone through phases in which electroconvulsive therapy, insulin shock therapy, and prefrontal lobotomy have been used rather freely and indiscriminately. Of these three, only electroconvulsive therapy is still used and then only by clinicians obliged to define a subpopulation who really benefit from the procedure. Among the currently popular forms of treatment are pharmacotherapy, cognitive behavioral therapy, and psychodynamic psychotherapy. Very often, these have been applied without examining the relevance of a given therapy for a patient or that patient's capacity to make good use of the treatment experience.

Sometimes, it is easier to gain perspective by taking examples from other disciplines. Let us take the hypothetical example of a young surgeon training under a master surgeon who teaches her to perform the best possible cholecystectomy. The young surgeon realizes that, with this skill, she now has an edge on her colleagues. She goes into private practice and reasons in the following manner: "Because I spent the best years of my life learning how to do this cholecystectomy. I now have good reason to use it." As a result, each patient appearing in her office with abdominal pain is very likely to undergo a cholecystectomy, regardless of whether the indications for it are clear. It is easy to condemn her approach, but is there not something like it going on in the field of psychiatry? Do therapists not tend to specialize in treatments rather than in treating patients' needs? We attempt to cope with this problem in psychiatry by making as clear as possible those situations in which hypnosis is not relevant to the clinical situation. The clinical assessment of hypnotizability is particularly useful in making this distinction. It is perhaps more important to inform patients when the use of hypnosis is not relevant than to tell them when it is.

Another phenomenon apparent in the late-twentieth century was a preoccupation with labeling the various disease syndromes in detail. We use labels only to the extent that they are operationally useful. Nosology is necessary insofar as it helps the therapist and the patient make appropriate treatment decisions. It is not absolute; it is rather a means to an end.

We have drawn on concepts from various schools within the field of psychiatry—psychoanalytic, biological, interpersonal, and existential, among others. In a sense, almost any modality may be helpful to somebody, somehow, under certain conditions. We are proposing the assessment of hypnotizability as one rational means for selecting patients most amenable to treatment, thus helping the clinician make a better match between patient and therapy. Our approach represents a systematic attempt to identify, measure, and use a given patient's optimal therapeutic potential. This process, which in the past has been relegated to clinical intuition, is subject to more precise study and consensual validation.

Organization of the Book

The structure of the book parallels the sequence of treatment in an encounter with a patient. In the first section, the phenomenon of hypnosis is defined and discussed in some detail. Then, the method for administering and scoring the HIP, a 5- to 10-minute clinical assessment procedure, is presented. This procedure is crucial in our evaluation of a patient for treatment.

In the second section, we present hypotheses and data relating performance on the HIP to personality style and psychopathology, along with a review of the pertinent literature and our own supporting research data. At this stage in the treatment session, the clinician is formulating hypotheses regarding the patient's characteristics and problems. He or she then can proceed to define a problem area suitable for intervention. This process is discussed in detail in the third section of the book, from both a theoretical and a practical viewpoint. After we explore the thinking behind the construction of a treatment strategy using hypnosis, we discuss a series of strategies with clinical examples.

Some patients require more than brief treatment or are interested in undertaking intensive psychotherapy. We present a method for using the assessment of hypnotizability in selecting among the various types of treatment. Finally, special considerations in the psychotherapy of the highly hypnotizable individual are discussed.

It is our hope that the flow of a typical evaluation and treatment session will be experienced in the process of reading the book. In structuring the book in this way, we wish to emphasize the assessment of hypnotizability in clinical work and the possibilities for constructing a treatment strategy that uses hypnosis in a way that excites involvement and improves outcome.

There has been growing interest in behavioral aspects of medical care over the past 25 years, as the public appetite for those aspects of medicine that have been labeled *alternative* or *complementary* continues to grow. According to an old adage of medicine, our job as doctors is to "cure rarely, relieve suffering often, and comfort always." Yet, in the twentieth century, we in medicine rewrote that job description. Intoxicated by our success with antibiotics, immunization, and new surgical techniques, we began to believe that disease was a foe that could be vanquished and that the role of medicine should be conquest of disease: cure rather than care. Thus, our motto became "Cure always, relieve suffering if you have the time, and let someone else do the comforting." Laudable and important as the goal of curing is, it can never be the only goal of medicine. No matter how good our ability to prevent and treat medical illness becomes, the death rate will always be one per person. Sooner or later, most people need medical and allied health care professionals to

help them cope with serious illness. Indeed, our very success in extending the life span and rendering previously fatal illnesses such as diabetes, heart disease, and many kinds of cancers, chronic rather than terminal, has increased the population of people with serious illness. Thus, the need and appetite for techniques such as hypnosis that are effective in quickly reducing anxiety and pain and can enhance habit control and adherence to treatment regimens are rapidly increasing. Eisenberg et al. (1993) reported that the percentage of Americans who used some form of complementary or alternative medicine increased in the 1990s by 1% of the population per year. Some 42% of Americans now use some form of complementary or alternative medicine. Furthermore, Americans spent more out of pocket for complementary treatments than they did for mainstream outpatient or inpatient care (Eisenberg et al. 1998). People seek such complementary treatments primarily for pain and anxiety (D. Spiegel et al. 1998), problems that are often not handled well in mainstream medicine.

This interest has persisted despite the growing use of psychopharmacological treatments and the massive shift in psychiatry toward psychopharmacology and away from psychotherapy. Despite the increased effectiveness and safety of antidepressants, mood stabilizers, antianxiety agents, and antipsychotics, many patients prefer to use nonpharmacological techniques or to use them in conjunction with self-management skills. The bulk of individuals with real but lesssevere adjustment problems may either obtain no help or be treated with medications that may be more powerful than they need or that do not address the problem at hand.

Hypnosis has occupied an unusual position in relation to both mainstream and complementary or, as it is now more often referred to, *integrative* medicine. It has a long history of being used both within and outside of medicine. The historian Henri Ellenberger (1970) points out that hypnosis represents the first Western conception of a psychotherapy, a talking interaction between doctor and patient that could lead to improvement: the "talking cure." Despite this long history of medical use, many in medicine consider hypnosis an *alternative* treatment. However, many in the alternative medicine world consider hypnosis a *mainstream* treatment, as evidenced by the fact that the National Center for Complementary and Alternative Medicine considers hypnosis a treatment under their purview only when it is used with the intention of altering disease progression rather than managing symptoms. The efficacy of hypnosis in the

management of symptoms is supported by a report of the National Institutes of Health Office of Technology Assessment that determined hypnosis to be of proven benefit in the treatment of pain, especially pain associated with cancer (NIH 1996). Thus, hypnosis has been both used, refused, and repositioned as a Western *alternative* treatment. Given the goal of *integrative* medicine (i.e., merging the best from both Eastern and Western nontraditional practices into mainstream Western medicine), hypnosis can and should play a pivotal role. The therapist can apply what has been learned about hypnotic control of the mind and brain to link a patient's mind and body, thus enhancing medical treatment by intensifying care, reducing suffering, and at times improving outcome. This page intentionally left blank

About the Authors

Herbert Spiegel, M.D., as Clinical Professor of Psychiatry at Columbia University, College of Physicians and Surgeons, directed the postgraduate course in hypnosis from 1960 to 1982. Currently at Columbia, he is Special Lecturer in Psychiatry and in private practice in New York City.

David Spiegel, M.D., is the Jack, Lulu and Sam Willson Professor in the School of Medicine, Associate Chair of Psychiatry and Behavioral Sciences, and Medical Director of the Center for Integrative Medicine at Stanford University Medical Center. This page intentionally left blank

Part I TRANCE: THE PHENOMENON AND ITS MEASUREMENT

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Defining Hypnosis

CHAPTER 1

Naturally Occurring Trance Phenomena and Related Myths

Oh, do not ask, "What is it?" Let us go and make our visit.

> T. S. Eliot "The Love Song of J. Alfred Prufrock"

Alterations of human awareness occur all the time. For example, there is the diurnal rhythm of sleep and wakefulness and the many stages of transition. Our contact with repressed and unconscious aspects of ourselves varies as well (H. Spiegel 1963b). Often in the course of the day we may enter and leave various meditative states, periods of apathy, or states of intensely excited activity and exhilaration. Many of these states have in common the constant shifting back and forth between peripheral awareness and focal attention.

No absolute dividing line exists between nonhypnotic and hypnotic alterations in consciousness, but altered, dissociated, or hypnotic-like experiences clearly occur in everyday life and provide a useful backdrop for understanding the hypnotic experience. Some examples follow.

1. Almost everyone commonly daydreams. For defensive purposes, relaxation, or numerous other reasons, an individual can indulge

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in vivid imagery in such a concentrated way that his or her usual awareness of the surrounding world is suspended.

- 2. Intense concentration on either work or play maximizes focal awareness so that events may occur around a person and be entirely outside his or her awareness, whereas ordinarily the signals from the periphery would be consciously perceived.
- 3. Many individuals have had the experience of listening to an important talk or watching an absorbing play only to discover afterward that they had been so involved in the experience that they required a moment of reorientation back to their temporal and spatial setting.
- 4. It is frequently observed that the most boring people to be with are two people who are "in love" with each other. They are so intensely involved with each other that they are unaware of the usual cues or counter-cues from others around them.
- 5. Natural childbirth, the work of Grantly Dick-Read (1944), and the Lamaze childbirth method provide other examples of hypnotic-like experiences occurring in everyday life. Although the term *hypnosis* is not employed when a woman uses these attention and relaxation methods to deliver a baby with minimal pain or discomfort, whatever the actual phenomenon is, the experience must be something akin to hypnosis.
- 6. The placebo effect, though often dismissed as a triviality of medicine, deserves attention in relation to hypnosis. A recent metaanalysis claimed that there is little evidence for the placebo effect, except possibly in pain control (Hrobjartsson and Gotzsche 2001). However, the analysis itself made certain assumptions that restricted its power to detect placebo effects-for example, emphasizing categorical rather than continuous outcome variables (D. Spiegel et al. 2001). What the authors showed was not that the placebo does not do anything, but rather that it does not do everything. Careful critical study suggests that spontaneous trance may well be a part of the placebo effect, and that the placebo phenomenon is quite complex and important, though not yet well understood (Brody 2000; Fischbach and D. Spiegel 2002; Shapiro and Morris 1978). There is evidence that hypnotic analgesia is far more powerful than placebo analgesia, at least among people who are highly hypnotizable (McGlashan et al. 1969).

The placebo effect often occurs in response to a situational context. For example, Beecher (1959) became interested in the problem of pain after serving as an anesthesiologist with the hospital unit at the Anzio Beachhead in World War II. He was impressed with the difference in pain reaction among soldiers at the battlefront compared to civilians in a Boston hospital who had the same degree of tissue damage. The soldiers reported far less pain and asked for considerably less pain medication than civilian surgical patients with comparable trauma. In general, when a soldier received a wound that was not severe enough to interfere with his awareness that he had been wounded, he was happy. He received an honorable exit from combat, and in the ensuing state of euphoria and gratitude for being alive, the pain was minimally important. Furthermore, unclouded consciousness and alertness were often necessary to remain alive during evacuation. For the postoperative surgical patients in Boston, the pain did not represent a statement of being alive; rather, it was an interference with their ongoing process of living.

My (H.S.) personal experience as a combat battalion surgeon in North Africa during World War II confirmed the Beecher study. Our general use of morphine with combat casualties was much less than anticipated. Furthermore, on the last day of the battle in Tunisia, I was wounded. A shell fragment hit my right ankle, seared my boot, and broke my lower tibia. After the explosive noise, I felt general pain but could not identify its source until I saw the steel fragment, like an arrow sticking into my leg. My immediate concern was that if I had to see the wound to localize my pain, where else was I hit? When the aid man arrived, I turned over and asked him to examine my back. I felt elated when no other wounds were found. I certainly needed no morphine. This was a "dream wound" for an infantryman-bad enough to get out of the infantry, but not bad enough to make a serious difference in living. During the jarring 4-mile ride on a litter to the mobile hospital, I held my leg to minimize the pain, but it was an almost welcome and agreeable sensation, given what else could have happened.

7. Thousands of people have experienced so-called miracle cures at Lourdes or similar shrines. Undeniably, some people go to the shrines handicapped in their own way and, as the result of their inspirational experience or enlightenment, leave improved or no longer handicapped. The walls of such shrines are decorated with crutches abandoned by many pilgrims.

Some individuals spontaneously undergo fugue states during waking hours in which they experience "islands of time" or dissociative

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states inaccessible by conscious recall, even after they have been reoriented to their usual state of awareness. During these times, such a person may act as though he or she were a different person with no conscious awareness of normal identity, friendships, and occupation. The person may even believe that he or she is in a different place and time. The following example illustrates this point.

The military police brought to the hospital a perplexed, bewildered young woman who had been picked up nearby and was unable to identify herself. She knew that she was at Fort Meade but did not know her name or where she lived. As officer of the day, I (H.S.) wanted to admit her to the hospital. However, the registrar of the hospital was oriented along strictly military lines, and he reminded me that the regulations made no allowances for the treatment or admission of nonmilitary personnel. Yet this was the middle of the night, the woman was in a serious predicament, and the registrar refused to shoulder the responsibility of sending her away. He went back to the office and searched the Army regulations to see how he could legally admit the woman as an emergency patient.

While his research was going on, I succeeded in putting the woman into a trance, in which she was able to identify herself and give in detail the whole sequence of her dilemma. She had traveled from her home in Florida after a friend wrote that her husband was dating another woman near the camp. She decided to surprise her husband, a sergeant on the post, and exert her influence to break up the affair. As she approached the camp gate, her conflict became intense as to whether she really wanted to face what she was afraid she would see, or whether she would be better off not seeing what she feared. She resolved the conflict in an irrational manner by developing amnesia and divorcing herself from her own identity as a protection against the impending crisis. With the hypnotic trance, I was able to help restore some of her former self-regard; then we contacted her husband. After mediation involving some common sense and understanding, she met with him and within a half hour they embraced and reaffirmed their love for each other, and her amnesia was obliterated.

As this dramatic scene took place, the registrar returned from his office with a triumphant smile on his face: He had found an Army regulation that sanctioned the woman's admission to the hospital. When he saw that she had recovered from her symptoms it was so difficult for him to reorient himself to this entirely new situation that he said, "But she must be admitted. We've already made out the papers."

- 8. There are also sleepwalking experiences, or somnambulism, in which a person who is apparently asleep rises from bed, walks around, and even performs complicated tasks. He or she may or may not become reoriented before being wakened.
- 9. Traumatic interpersonal interactions may occur that are clearly hypnotic-like but in which hypnosis is never formally considered or used, as in the following example.

A woman in her late 40s had hiccups that were so severe they interfered with her ability to eat or retain food or fluids. She lost a considerable amount of weight and was hospitalized to receive intravenous nourishment. In that setting, she was seen by one of us (H.S.) and proved to be hypnotizable. Her hiccups ceased within an hour after the trance induction and treatment instructions. The next day, she was removed from the critical list and discharged.

The drama of her response was clearly related to an experience 15 years earlier when she had had a similar attack of hiccups. Her general physician, who had just recovered from a myocardial infarction and was about to retire, heard about her dilemma and had a final consultation with her before he moved to Florida. In this dramatic setting, with the doctor still convalescing but concerned enough to see her, she came into his home and from his bedside he said to her, "I'm going to teach you some breathing exercises." With these breathing exercises, her hiccups stopped for 15 years, which is an impressive clinical result. But there was nothing said about hypnosis at that time, and the doctor himself later denied any knowledge of it.

All of these illustrations, from different points of view and with individuals experiencing varying degrees of alteration of awareness and
dissociation, involve an increase in focal attention to one aspect of the total situation and a concomitant constriction of peripheral awareness of other aspects. Missing in many of these illustrations is the presence of a knowledgeable professional who says that he or she is using hypnosis with the individual, but the absence of the professional by no means implies that hypnosis has not occurred. Rather, the trance state exists on a continuum of everyday life experience. When we formalize its occurrence and exactly define its essence, we simplify the situation for ourselves but are not necessarily doing justice to this ubiquitous human phenomenon.

Prevalent Misconceptions

It has been said that myths are beliefs that never were true and always will be. Numerous myths about hypnosis exist among both professionals and laypersons (Torem 1992). We have selected 10 of the most prevalent myths about hypnosis for discussion and clarification.

Hypnosis Is Sleep

The misconception that hypnosis is sleep is in part related to the rather unfortunate choice of the term *hypnosis* by Braid from the Greek root *hypnos*, meaning sleep. As the subject in a trance more often than not has his or her eyes closed, seems to be breathing quietly and regularly, and has some alteration in consciousness, people are often misled into thinking that the subject is asleep. Many clinicians and others who work with hypnosis still use sleep terminology—for example, "You are going into a deep, deep sleep," or "Wake up from that trance"—or they think in terms of the awake versus the hypnotized state. Perhaps the term *poetic sleep* would apply to some trance experiences.

In fact, the subject, if he or she is to enter the trance state, becomes more alert and awake than usual. He or she is entering a state of intense concentration. The trance state and sleep do share a relative diminution of peripheral awareness. But when one is asleep, focal awareness is dissolved, whereas in the trance state it is intensified. This clinical observation has been reinforced by electroencephalogram (EEG) studies that indicate a high incidence of alpha activity during the trance state (London et al. 1969). Alpha activity is most often described as the noise that the brain makes when it is alert and resting and is inconsistent with EEG patterns observed during sleep.

Hypnosis Is Projected Onto the Patient

The myth that the hypnotist exudes some force or energy onto the patient may well derive from Mesmer's ideas about magnetic force in relation to the trance state. He thought that the trance was elicited by exposing subjects to some sort of electromagnetic force, and he would gather patients around a large magnet to experience the effect of this force. From this practice, we retained the term *induction* in eliciting the trance state and the misconception that some force is exerted on the hypnotic subject that results in the trance experience. As we explained earlier, trance capacity is inherent in an individual. The operator merely provides an appropriate occasion for the subject to explore his or her own trance capacity if he or she wishes.

The distinction of the operator as a facilitator who helps a subject explore his or her own trance capacity is absolutely critical for clinical work in hypnosis because it puts what happens in perspective. Many clinicians have had some experience with hypnosis in their training but have given it up, often for one of two reasons: They are either frightened by their "successes" or discouraged by their "failures." Believing that eliciting a trance state involves projecting some quality of authority or control, a clinician is often frightened when he or she meets an extremely compliant subject who seems almost ceaselessly plastic in responsiveness. Eventually, this clinician is bound to run across a number of nonhypnotizable subjects and would then assume that he or she had failed in some way. Either extreme implies taking more responsibility for what occurs in the trance condition than any operator has a right to do, and it confuses the diagnostic assessment.

Freud himself reported this alarmed reaction:

And one day I had an experience which showed me in the crudest light what I have long suspected. One of my most acquiescent patients, with whom hypnotism had enabled me to bring about the most marvelous results, and whom I was engaged in relieving of her suffering by tracing back her attacks

of pain to their origins, as she woke up on one occasion, threw her arms round my neck. The unexpected entrance of a servant relieved us from the discussion. From that time onwards there was a tacit understanding between us that the hypnotic treatment should be discontinued. I was modest enough not to attribute the event to my own irresistible personal attractions, and I felt that I had now grasped the nature of the mysterious element that was at work behind hypnotism. In order to exclude it, or at all events to isolate it, it was necessary to abandon hypnotism. (Freud 1925, p. 27)

When performed with appropriate clinical measurements, the trance induction is neither a success nor a failure for the tester; it is rather simply another clinical test. No neurologist takes credit for the result of a Babinski test, be it positive or negative: This attitude of dispassionate observation is also appropriate for inducing and assessing the trance state. It is knowing how to test and how to use the test data that reflects the tester's competence.

Only Weak or Sick People Are Hypnotizable

The myth that only weak or sick people are hypnotizable emerged from the famous debate between Charcot and Bernheim concerning the best subjects for hypnosis. Charcot, the great French neurologist, was hypnotizing his patients, especially those who were hysterical. He considered the capacity to be hypnotized a sign of mental dysfunction with a neurological basis. Bernheim, on the other hand, was hypnotizing his staff and was at least somewhat constrained to argue that the capacity to be hypnotized was not indicative of psychopathology (Ellenberger 1970). He also held that there was no physiological basis to hypnotic capacity. In terms of the relationship between hypnotizability and psychopathology, it seems that history favors Bernheim's position. Data we present in subsequent chapters indicate that, if anything, the capacity to be hypnotized is a sign of relative mental health and that the most severely disturbed patients are, in general, incapable of hypnotic trance. Although some perfectly psychiatrically healthy people are not hypnotizable, in general the capacity to be hypnotized is a sign of relatively intact mental functioning.

Hypnosis Occurs Only When the Doctor Decides to Use It

The trance state is on a continuum with the normal waking consciousness. Individuals with trance capacity commonly slip in and out of trance states. Thus, it is naive for a clinician to assume that if he or she is not formally using hypnosis, it does not occur.

As an example, at the beginning of World War II, I (H.S.) had the occasion to spend some time with Dr. Gustave Aschaffenburg, who had been professor of forensic psychiatry at the University of Cologne and was in the United States as a political refugee. He was distressed that as an alien he could not help directly in the war effort, but he did what he could to train young army psychiatrists in the use of hypnotic techniques. It was my good fortune to meet him in Baltimore. In several informal sessions, Dr. Aschaffenburg told us a great deal about his early experience with hypnosis in Germany over the course of many years. When he was a boy he had chicken pox, and an infection of one of the lesions left a rather deep scar right in the center of his forehead. Years later, while studying criminals at the prison in Cologne, Dr. Aschaffenburg observed that on many occasions during his psychiatric interview the prisoner would tend to focus on this scar and become almost transfixed. At first he did not know what to make of it, but then it occurred to him that the men were experiencing a trance state. This sparked his interest in hypnosis, and from that time on he did much research in the field.

Patients respond to suggestions constantly. For example, many surgeons have learned that they receive a much better response from their postoperative patients when they approach them in the morning with the question "How are you feeling?" rather than "How is your pain?" The latter question becomes for some patients a subtle suggestion that to be in tune with their surgeon they must be experiencing pain. This is a special problem with highly hypnotizable individuals who are very prone to slip into trance states, especially under duress. Clinicians often see people at a time of stress, when spontaneous trance states are most likely to occur. Many hysterical symptoms are actually spontaneous trance states—for example, hysterical fugue states. These fugue states can be manipulated by the use of hypnotic techniques and are an example of spontaneous hypnotic phenomena, which the astute clinician should recognize.

Symptom Removal Means a New Symptom

The symptom substitution argument arose from orthodox psychoanalytic principles. Some argued that removing a psychologically determined symptom early in psychoanalytic treatment would ally the therapist with the parts of the patient's unconscious that were seeking to defeat resolution of the unconscious conflict that instigated the symptom. In addition, the therapist who helped remove the symptom might be playing into certain transference wishes of the patient. The rapid resolution of the symptom would either diffuse the patient's desire for understanding and mastery of the conflict or force the conflict to emerge as a different, perhaps more serious, symptom (Reider 1976).

This notion of symptom substitution derives from what is commonly termed Freud's *hydraulic* model—a closed energy system of a rather fixed relationship between the frustration of unconscious desires and the elaboration of a symptom. As he understood it, any neurotic symptom had its roots in unconscious conflict:

[P]eople fall ill of a neurosis if they are deprived of the possibility of satisfying their libido—that they fall ill owing to "frustration," as I put it—and that their symptoms are precisely a substitute for their frustrated satisfaction. This is not supposed to mean, of course, that every frustration of a libidinal satisfaction makes the person it affects neurotic, but merely that the factor of frustration could be discerned in every case of neurosis that has been examined. (Freud 1917, p. 344)

It followed from this formulation that to effectively relieve a neurotic symptom, one must disentangle the unconscious conflict—hence psychoanalysis as the treatment of choice.

However, the hydraulic model of Freud's theories has been widely questioned. The connection seems more a theoretical nicety than an empirical fact. In our experience, the most persuasive argument against the symptom substitution theory is that we simply have not observed it happen. Certainly there has been enough successful symptom-oriented treatment via a variety of nonanalytic techniques (i.e., behavior modification, biofeedback, hypnosis) without the emergence of a substitute symptom to call this theoretical formulation into serious question. In general, patients who master symptoms feel better rather than discover new symptoms. In fact, we have observed what we call a *ripple effect*^{*} (H. Spiegel and Linn 1969)—that is, patients who master a troubling symptom in one area of their lives find themselves overcoming other problems in other areas. The patients have a sense of mastery and accomplishment, which, if anything, frees them to take a look at the unconscious significance of their symptoms when no longer humiliated and victimized by them.

Although a given unconscious conflict may give rise to the development of the symptom, it is not clear that that same conflict is operative in the perpetuation of the symptom. Often secondary factors, such as social embarrassment, secondary loss, and habit, keep a symptom in operation long after the original conflict has receded in importance or been resolved. Finally, if long-term intensive psychotherapy is appropriate, there may be no better way to cement the working alliance in Greenson's (1965) sense of the term than to use a technique such as hypnosis to help the patient master a difficult problem in his or her life. However, it is important to note that the way in which hypnosis is used is critical. If the therapist uses it in a coercive or unpleasant way that denies the patient mastery rather than enhances his or her sense of mastery, hypnosis may indeed prove mischievous. It should be added that if the therapist has a conviction that the removal of one symptom will lead to another, this conviction may find its expression in the behavior of the patient (H. Spiegel 1967).

Hypnosis Is Dangerous

There is simply no evidence to support the idea that hypnosis is dangerous. In one study at a midwestern university, this hypothesis was tested by doing a simple induction on one group of college students and allowing a control group to sit by themselves in a room for a similar period of time. The researchers expected a number of psychological problems to emerge in the hypnotized group. In contrast, they found that the students who were hypnotized found it a rewarding and helpful experience, wanted to undergo it again, and as a group seemed more psychologically healthy than the control group (Faw et al. 1968). Furthermore, the use of hypnosis in a professional setting

^{*}We are indebted to Prof. H. J. Leichter of Teachers College, College University, for proposing the term *ripple effect* for this phenomenon.

has been officially sanctioned by the American Psychiatric Association and the American Medical Association (Group for the Advancement of Psychiatry 1962).

There have been occasional reports of psychotic reactions in patients who have been hypnotized (Joseph et al. 1949; Wineburg and Straker 1973). We are not aware of any report of harm to a patient as the result of hypnosis itself. These preceding reports did not include clinical details demonstrating causation or information about the therapist's expectancy regarding hypnosis or symptom removal. In our experience using hypnosis with thousands of patients, we have had no patients become psychotic as a result of hypnosis. However, any form of coercion or intimidation, whether hypnosis is overtly used or not, can have adverse consequences, particularly in a patient whose psychological status is fragile. Thus, hypnosis should never be used in a manner that is coercive or involves deception. Some paranoid patients may attribute excessive powers to a hypnotist and become angry or more psychotic at what they perceive as a loss of control. This problem can be handled easily by making the situation clear, explaining to the patient that all hypnosis is really self-hypnosis, and allowing the patient to make his or her own decision. Surprisingly, we have tested many frankly paranoid patients for hypnotizability with no adverse effect. One patient who had a delusion that he had been placed in a trance by his brother-in-law and was having his mind controlled in this manner eagerly cooperated with the Hypnotic Induction Profile, saying that he wanted to learn more about how his mind was being controlled.

Some depressed patients may have unrealistic hopes that the trance experience will end their depression. Their magical wishes should be explored and defused before the induction is performed to avoid having yet another hope dashed in a situation that could provoke a suicide attempt.

If a responsible therapist takes the simple precautions of clearly explaining to the patient what the trance state is and what will be done, and if he or she avoids any coercive or deceptive uses of hypnosis, it can be stated without reservation that the trance state in and of itself is not at all dangerous. However, it is worth keeping in mind that good hypnotic subjects are especially sensitive to subtle cues, both conscious and unconscious, conveyed by the operator. Should an inexperienced hypnotist begin to panic, for example, at a patient's profound trance state—wondering whether the patient will "come out of it"—or should he or she become frightened at the intensity of an abreaction during a hypnotic regression, the subject may sense this anxiety and in turn become anxious. The back and forth reinforcement of anxiety can escalate to the point at which the situation becomes a *folie à deux*. The hypnotist should remember that firm, quiet reassurance always works, even if a good hypnotic subject is quite upset. The very depth of the response indicates that the subject expects some structuring of the experience. The following clinical example demonstrates how sensitive a good hypnotic subject is even to subtle cues from the operator.

A few years ago, I (H.S.) was asked to see a 24-year-old woman who had severe, chronic, generalized, postoperative abdominal pain. The diagnosis of Hodgkin's disease was confirmed during the abdominal exploration, and although her life span was limited, it was estimated that she had a number of years to live. Meanwhile, she built up her demand for meperidine hydrochloride (Demerol hydrochloride) to the point at which addiction was feared. In this context, I was asked to explore the use of hypnosis to contain her pain experience. In the presence of several medical students and residents, and as she was telling me that she could not possibly be hypnotized, she went into a trance intense enough to experience no cutaneous pain sensation when pricked with a pin. A program for controlling her pain was developed with posthypnotic signals. It was so effective that within 24 hours she was free of pain without any meperidine hydrochloride.

Because of the patient's persistent skepticism, the resident on the case accepted the responsibility of reinforcing this hypnotic control. This program went well for a few days until the resident, for personal reasons, became fearful about using hypnosis. The next day, with hesitation and conflict, he again gave the signal to the patient to reinforce the anesthesia to pain, but this time the patient was unable to go into a trance state and the pain recurred. When I visited the following day, she told me how sorry she was that she could no longer go into hypnosis and thanked me for trying to help her. But while saying this in my presence, she again went into a trance state as intense as any she had had before and was able to re-establish control of her pain without any medication.

Thus, this patient, in spite of her high capacity for hypnosis, respected the resident's unconscious plea for her not to enter

the trance state. He had in fact been "forbidden" to use hypnosis by his orthodox analyst, so her entering a trance would have placed him in a more than uncomfortable position.

Hypnosis Is Therapy

That hypnosis is therapy is also a troublesome myth. We avoid the use of the term *hypnotherapist* because by itself hypnosis is not therapy. The hypnotic state is a capacity; it is a certain type of attentive, receptive concentration and can be used to create a receptive matrix for a therapeutic strategy. It may enhance therapeutic leverage, but by itself it is not a treatment. In the service of a good therapeutic strategy, the hypnotic state can accelerate and facilitate treatment; in the service of a bad therapeutic strategy, it can accelerate and enhance deterioration.

Thus, a clinician using hypnosis must be well versed in the various clinical strategies that make up his or her discipline, be it psychotherapy or pain relief. He or she must also have that most valuable of professional attributes: the knowledge and willingness to seek appropriate help when he or she is unable to cope with a situation. An occasional patient who seeks help with weight control through hypnosis, for example, may have anorexia nervosa, which is a lifethreatening illness. If a naive therapist uses hypnosis to help the patient eat less, he or she may be providing professional sanction for the patient's thought disorder in regard to eating. To make good use of hypnosis, one must first be a good clinician.

A Hypnotist Must Be Charismatic, Unique, or Weird

For every successful hypnotist with a reputation for eccentricity or who wears purple, there are 10 whom one would never identify as such in a crowd. The myth that hypnotists are unique in some way is really a corollary to the earlier myth that hypnosis is projected onto a patient by the hypnotist. The good hypnotist can create an appropriate atmosphere in which the patient may explore his or her own trance capacity. The hypnotist's eccentricities may be tolerated as long as they do not interfere with that atmosphere. If the hypnotist does or says something aesthetically offensive to the patient, he or she may hamper the patient's performance. The hypnotist must establish sufficient rapport and trust with the patient so that he or she can proceed to assess hypnotizability. In general, the respectful demeanor appropriate to any

Women Are More Hypnotizable Than Men

clinical setting provides the best atmosphere for hypnosis.

Our data on several thousand cases indicate no difference in hypnotizability of women compared with men. This myth grows out of the same sex role stereotyping that implies that women are more passive and dependent and less assertive than men. It is simply another discredited stereotype.

Hypnosis Is Only a Superficial Psychological Phenomenon

Referring back to the debate between Charcot and Bernheim, in which Charcot held that hypnosis was a neurological phenomenon with psychological overlay and Bernheim maintained that it was solely a psychological one, it would seem that Charcot prevailed in this part of the argument. There is growing evidence that relates the capacity for hypnosis to certain neurophysiological substrates, and we review this evidence in later chapters. Hypnotic perceptual alteration involves measurable alteration in the function of sensory cortices, as well as in parts of the attentional system in the brainnotably, the anterior cingulate cortex. Thus, hypnosis is a phenomenon of the brain as well as of the mind. Hypnotic concentration is sufficiently intense that it can modulate aspects of cognition and perception heretofore thought to be automatic. For example, highly hypnotizable subjects hypnotized to focus on one portion of a letter or instructed that the letters they are reading are written in a language they do not understand show reduced interference in the Stroop color-word task (Nordby et al. 1999; Raz et al. 2002). This finding is surprising, because the classical, widely replicated Stroop effect indicates that when reading the word red written in green, there is a delay in naming the color of the ink: The automatic process of reading interferes with registering and reporting the color of the word. However, hypnosis seems to allow subjects to narrow the focus of their attention so that they can bypass this lexical inhibition of color perception and reporting.

Our finding of an interesting relationship between the eve-rollthat is, the capacity to look up while closing one's eves-and hypnotic performance, along with other presumed neurophysiological phenomena (Frischholz et al. 1992; H. Spiegel 1972; Tebecis and Provins 1975), suggests to us that the capacity for hypnosis may be a biological rather than a strictly psychological capacity. If good subjects are not born, then perhaps they are made early in life. Hypnotizability is a surprisingly stable trait, widely distributed among children and somewhat less common among adults. Certain early life experiences. such as imaginative involvements with parents, and, on the other hand, physical punishment, seem to encourage certain people to use and retain their hypnotic capacity from a very early age. Thus, the concept of hypnotizability is an important component of the modern understanding of hypnosis. The Hypnotic Induction Profile is clinically useful because it provides a rapid, reliable, and valid measure of hypnotic responsiveness, and it relates a biological prediction of hypnotizability to behavioral and phenomenological measures. Some individuals live up to their presumed biological capacity, whereas others do not, and this, we think, has clinical significance. In any event, there is growing evidence that hypnosis reflects a trait as much as a state and is as much a neurophysiological as a psychological phenomenon.

CHAPTER 2 Formally Induced Trance Phenomena

Seeking and learning is all remembrance.

Socrates in Plato's Meno

In what follows, we define what we believe to be the most important aspects of the hypnotic experience, bearing in mind that any definition is bound to do injustice to its subject. The hypnotic experience is characterized by an ability to sustain a state of attentive, receptive, intense focal concentration with diminished peripheral awareness in response to a signal. Hypnosis is a function of the alert individual who uses his or her capacity for maximal involvement with one point in space and time, thereby minimizing his or her involvement with other points in space and time. The hypnotized person is not asleep, but awake and alert.

There are three main components to hypnosis: absorption, dissociation, and suggestibility (Figure 2–1).

The crux of the trance state is the dialectic between focal and peripheral awareness. Any intensification of focal attention necessitates the elimination of distracting or irrelevant stimuli. Likewise, a position of diffuse and scanning awareness requires a relinquishing of focal attentiveness. In fact, the one type of awareness implies the existence of the other. We not only pay attention to our given task but also ward off distractions. An analogy to the visual system may help clarify this concept. The macular, or central, visual field encompasses a comparatively small arc of 5 degrees to 7 degrees in the visual field. We can see with good detail only a small part of the world that surrounds us. Our nonmacular, or peripheral, vision is rather diffuse and contains very few color receptors. A realistic view of our visual perception at any moment in time consists of a small circular area of detailed and colorfilled vision surrounded by a rather hazy area devoid of any details and color. Yet, we assemble for ourselves a relatively stable, colorful, and detailed visual environment based on the presumptions that everything more or less stays where it is and that the sum of our individual per-



THEORY OF HYPNOSIS

FIGURE 2-1

Reprinted from Spiegel H, Greenleaf M: "Personality Style and Hypnotizability: The Fix–Flex Continuum." Psychiatr Med 10(1):13–24, 1992. Used with permission.

ceptions equals the total visual field. A temporal and spatial picture is assembled out of a series of momentary glimpses. It is our option to focus on an individual detail or to assemble the broader picture. The hypnotic state is analogous to macular vision; it is intense and detailed but constricted. It is perhaps no accident that tunnel vision, characteristic of certain kinds of hysteria, is associated with the high hypnotizability of persons with hysteria. One responsive hypnotic subject informed us that she experienced tunnel vision every time she entered the trance state.

Thus, the trance state is a form of intense focal concentration that maximizes involvement with one sensory percept at a time. The process of weaving these percepts into the fabric of our total consciousness requires a kind of scanning awareness typified in the nontrance alert state. Our overall consciousness is a product of dialectical tension between intense focal experience and less intense, more balanced integration of various focal and peripheral experiences. We conceive of the hypnotic trance as a part of the everyday experience of any individual who has hypnotic capacity. We expect that this capacity for intense trance experience influences the general nature of a highly hypnotizable subject's consciousness, without the subject ever having had formal induction. This position that trance is a common experience for those with hypnotic capacity is supported by several research studies. Hilgard (1970) documented a tendency for imaginative involvement among highly hypnotizable individuals. Tellegen and Atkinson (1974) found that high hypnotizability was correlated with a trait that they labeled "absorption." This trait comprised a positive response to written questions about unusual and intense absorption in experiences such as reading a good book or watching a play. In fact, the trance experience is often best explained to new patients who have questions about it as being very much like being absorbed in a good novel: One loses awareness of noises and distractions in the immediate environment, and when the novel is finished a moment of reorientation to the surrounding world is required.

Trance Induction and the Role of the Operator

Although the hypnotic experience may occur spontaneously in an individual with the requisite capacity, the experience is influenced by the presence of an operator whose goal is to elicit the trance state in a disciplined way. We disagree with the archaic notion that hypnosis is "projected" onto a subject by a charismatic and authoritarian figure. Nonetheless, the interpersonal aspects of the trance state are complex and, in the minds of patients seeking help with hypnosis, raise the question of who is controlling whom.

The hypnotic situation does not involve control of one person by another in an absolute sense; rather, it consists of someone more willing than many others to suspend his or her critical judgment. He or she is capable of using critical judgment at any time but is less prone to do so. We address the common question about whether someone in a trance state can be made to do something against his or her will in the following manner: Those who are highly hypnotizable, especially when in trance states (with or without a formal induction ceremony), are more prone to stretch the limits of their usual array of responses at the suggestion of someone else. They retain, at all times, the capability of breaking with the trance command but are less likely to do so than nonhypnotizable persons. The more the command is in conflict with a

person's customary beliefs and activities, the more likely the person is to break with the command. Time is another crucial factor in this equation; it is easier for a highly hypnotizable individual to correct outside premises according to his or her own judgment if he or she has several hours alone to do so. A persistently coercive atmosphere maximizes an individual's tendency to dissociate from his or her own critical judgment and to adopt the premises of another person.

There are essentially three major styles for evoking or inducing the trance state:

- 1. One can be frightened into a trance state by the use of fear and coercion.
- 2. Under appropriate conditions, a subject can be seduced into a trance state. This seduction can be sexual, nonsexual, or a combination of both.
- 3. A subject can be simply guided or instructed to shift into the trance state.

Obviously, the last-mentioned is the appropriate method in the therapeutic field and is the basis for our later discussion of trance induction procedures.

Coercion

Even though the first two styles in the preceding list have no legitimate or ethical place in the therapeutic arts, it is useful for the student of hypnosis to know that these styles can be used and are certainly effective. The following experience that I (H.S.) had in the army during World War II illustrates the use of coercion.

One day I received a phone message from the military police that there was a soldier in the emergency room who wanted to kill me. This was an alarming and attention-getting message, and I immediately proceeded down to the emergency room. As I opened the door in the small room in which this soldier was isolated, he lunged at me and tried to choke me. Fortunately, I was strong enough to grab him with my left hand on the back of his neck while twisting his right extended arm with my right hand. When the soldier was in this awkward position, his face was, by coincidence, toward the desk, on which there was an ink bottle. While holding him tightly, I said to him on the spur of the moment, "Look at that ink bottle and keep looking at it!" To my amazement, I could feel his tense muscles relax, and within seconds he became limp and collapsed to the floor. As he lay on the floor, I talked with him and recognized him as a soldier with whom I had been involved the week before. It turned out that his rage was due to a clerical error reassigning him to active duty rather than assigning a medical discharge that I had promised him.

Having discovered how readily he could be frightened into a trance state, I readmitted him to the hospital for further treatment. It turned out that he was what we now identify as a patient with grade 5 syndrome, and I was able to do a number of research studies with him using hypnotic age regression, some of which have been reported. (H. Spiegel et al. 1945)

Although I am not especially proud of demonstrating that a person can be frightened into a trance state, it seemed warranted under the circumstances and was not as aberrant as it would have been in a civilian setting. We suspect that this kind of induction goes on often in authoritarian settings such as schools, prisons, courtrooms, and some families.

Seduction

The seduction method also occurs over and over again, but it is usually not reported as such. The following case demonstrates how readily seduction can induce trance.

An actress in Las Vegas attended a show that featured a stage hypnotist. She volunteered to be a subject for one of his demonstrations and discovered not only that she was highly hypnotizable but that the experience was erotically exciting for her. She returned the next day and volunteered again. After several similar experiences, a serious personal relationship developed between the actress and the hypnotist, leading to an active sexual relationship. Her family was wealthy, and the hypnotist soon found that out. He, at the time, was a married man with children, but he suddenly decided to divorce. She was much younger and just getting over a divorce from a brief marriage. On learning of their plans to marry, the actress's father actively intervened to the point of persuading his daughter to travel to New York to be examined psychiatrically. She complied with her father's wishes because "I love my Daddy, and this is the least I could do to please him." When examined in New York, she was found to be highly hypnotizable (a person with grade 5 syndrome). She was being coerced into marriage with hypnosis and deception. While in trance, she was urged to delay her decision and consider alternatives. She came out of the trance state with an almost total amnesia for what had transpired and said that she did not know why but thought that she would call off her planned marriage. She phoned her father, who was pleased to hear the news. She also phoned the hypnotist, who immediately flew to New York and, on the following day, managed to sequester her in a hotel bedroom and rehypnotize her while they were engaging in sex. The next morning, she phoned her father to say that she had made a terrible mistake in calling off her marriage and had decided to marry that day. It became apparent that she was being used as a pawn between two hypnotists, one using seduction and the other, in essence, acting as an agent for her father. This was an untenable treatment situation, and the psychiatric intervention was terminated. In fact, she did marry the stage hypnotist, and within a year she not only divorced him but agreed to pay alimony as part of the divorce settlement.

There is no doubt that, in one of the many variations of man's inhumanity to man, much abuse has occurred by enhancing fear or seduction with the extra leverage of hypnosis. Most of these events go unrecorded because the people who have mastered hypnotic techniques for exploitation do not write about their achievements. This is not the place to discuss the ethical, legal, and moral implications. We acknowledge that exploitation does occur, and we point out that certain highly hypnotizable individuals are especially vulnerable.

Some highly hypnotizable subjects actively seek situations in which they feel they can place themselves under someone else's control. This may happen unconsciously, in spite of conscious protest. For example, some years back, I (H.S.) conducted a study of hypnosis using 16 of the 20 patients on a ward. During my absence from

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the ward, there was apparently much discussion about what went on in the examining room. One day one of the patients not involved in the study appeared in my office and said: "Sir, you could not hypnotize me even if you wanted to." I noticed that as he was saying this, his right eye fixed on a penciled dot used for the trance induction, and then closed. I challenged him: "Then why can't you open your right eye?" He struggled to open his right eye but was unable to. At the same time, in a mildly defiant way, he told me that his left eye was open. He was actually begging for the signal to enter the trance just as the other men had described it. I then said, "All right. Now both your eyes will close." His eyes did close, and he went into a deep trance state. This experience is not unusual; people with significant trance capacity manage to enter trance states by themselves as long as the hypnotist does not interfere with the process.

Dependency and the Role of Self-Hypnosis

Unconscious expectations play into a transference problem common to many forms of psychotherapy—dependency. The patient is prone to attribute great powers of good and evil to the therapist and expects him or her to take responsibility for the outcome of the treatment. Such expectations tend to shift the focus from a collaborative to a dependent and vertical relationship. Rather than being disappointed with him- or herself, the patient can then convert failure into anger at the therapist.

The hypnotic situation can intensify dependency problems if conducted in an authoritarian manner. The approach recommended here defuses dependency by first evaluating trance capacity and then teaching self-hypnosis. In recognition of dependency factors, the therapist attempts to deal with them indirectly and by example, rather than by discussing the possible unconscious significance of the patient's expectations. At the beginning of an evaluation, the therapist briefly explains that the patient's hypnotizability will first be tested. This explanation immediately alerts the patient that the therapist defines his or her role as evaluator. Thus, the "responsibility" for the nature of the trance state rests with the patient. The implication is that fearful or angry feelings will affect the patient's performance, but not that of the operator. Questions about the nature of the trance experience are answered briefly, and the patient is urged to observe for him- or herself what the trance experience is like.

Dependent expectations are further countered by the incorporation of instructions for self-hypnosis within the Hypnotic Induction Profile (HIP). All hypnosis is, in reality, self-hypnosis, and the patient is taught from the beginning to master his or her own trance capacity. Furthermore, the treatment exercises that are taught incorporate the notion that the patient may hypnotize him- or herself to reinforce a particular strategy. Unlike many other therapists who use hypnosis, we do not encourage patients to return for repeated sessions of formally induced hypnosis. Rather, we urge patients to practice hypnotizing themselves, usually every 1 or 2 hours during the first weeks. There are occasional situations in which we ask a patient to return for further reinforcement. In general, however, when treatment extends beyond one session, we use the time to discuss problems and reflect on the trance experience. We use hypnosis repeatedly only if clarification of the induction procedure is needed or if help is requested with a different problem.

Additional sessions are also used to deal with problems that arise in the patient's life in relation to his or her change in behavior. Sometimes friends and family are surprised or even displeased by marked change. A person's altered view of him- or herself relating to his or her mastery of a particular problem may lead to questions regarding other assumptions in his or her life, and he or she may want to discuss them. For example, a young woman who entered treatment because of habitual hair pulling that had left the back of her head bare in spots decided to move on to other issues after overcoming her habit in a few weeks. She began to lose weight, and she shifted the focus of the therapy to a discussion of her personal relationships. After several months of weekly sessions, she ended a long relationship with a disturbed man. Several other changes also occurred in her life. This brief illustration is an example of what has been described as the "ripple effect" (H. Spiegel and Linn 1969). Change in one area often leads to change in other areas as an individual develops a sense of mastery over his or her life. If the need for extended therapy sessions arises, the sessions proceed along more conventional lines and usually do not involve repeated trance induction.

Occasionally, patients who have not found the initial treatment strategy useful want to continue in psychotherapy to pursue a more extended process of reasoning and, perhaps, transference exploration.

A woman in her 30s presented for help with weight control, frigidity, and a feeling that she was unkind to people close to her. She was taught an exercise for help with the frigidity, which she felt was her primary problem. At first, she noticed that there was no particular change in her sexual problem, but she wanted to review her life situation, particularly as it related to an episode of sexual assault at age 4 that she had recalled before coming to the therapy. Thus, the focus shifted from symptom treatment to personality exploration, using the woman's extreme hypnotizability as one organizing theme. Her primary defense against her fear of being exploited was a kind of stony withdrawal, and she often adopted the attitude that people such as her husband were "bothering" her. She spent long periods of each day in reverie, imagining that she was something other than what she was. The therapy took the direction of helping her control and limit these trance experiences and providing her with guidelines for asserting herself in interpersonal situations. Gradually, she became less isolated and defensive, and she began to enjoy her sexuality more and to feel that she was becoming a warmer person. Surprised feedback from her husband confirmed this impression. After a year of weekly therapy, she spontaneously overcame some old phobic problems and began to lose weight.

In this case, a brief symptom-oriented approach did not elicit a response, but a response did occur in relation to subsequent personality exploration that helped this woman master her trance capacity and change her relationships with important people in her life. Her early expectation that something would be "done to" her was reinforced by an earlier experience with hypnosis in which the operator repeatedly induced a trance for weight control but did not teach her self-hypnosis. Her dissatisfaction with the early part of treatment and criticism of the therapy subsided as she began to evaluate her tendency to keep people at a distance. With

recognition of this tendency, she made several important changes in her life.

Thus, whether the treatment consists of one session or extended psychotherapy, the emphasis on self-hypnosis deals by example with dependent expectations. Self-hypnosis encourages the patient to collaborate with the therapist and to master life circumstances.

Hypnotic Induction

By using a standardized induction procedure, which involves systematic questioning regarding physiological, behavioral, and phenomenological responses, the variable influence of different operators on trance performance is minimized, and the trance capacity of a subject can be systematically documented. The standardized approach is intrinsic to our method and is described in Chapter 3, Rationale for a Clinical Test, and Chapter 4, Administration and Scoring. However, any hypnotic induction carries with it certain features that are worth noting: the aura, the psychophysiological enhancement, and the plunge.

Aura

The aura is a series of expectations and anxieties that the subject brings to the hypnotic situation. It can serve to enhance or maximize the hypnotic experience, as when the subject has been led to believe that the hypnotic encounter will result in the successful resolution of a major life problem. It also can hamper the hypnotic experience, as when the subject suspects that the operator will use a posture of trust to exploit him or her.

The following is an example of an aura that enhances hypnosis.

I (H.S.) was invited, while visiting a university, to see a patient with hysterical paraplegia. She had been through a series of other approaches that had failed to help her, and she was eagerly anticipating the meeting. She had agreed to be seen in front of a large audience of physicians, but the meeting was scheduled for a Sunday, and she was a fundamentalist Baptist. She consulted her minister, who concluded that it would be "to the greater glory of God" if she were healed on the Sabbath. With this background of expectation, she was wheeled into the auditorium, and her wheelchair was stopped some 20 feet from me. With no more than the introduction, she rose from the wheelchair to which she had been confined and walked over to introduce herself. In this case, the aura was so profound and overwhelming that the formalities of hypnotic induction were unnecessary. The aura alone not only propelled the patient into a spontaneous trance but also evoked the desired therapeutic response.

In contrast, when a young doctor with little experience and appropriate anticipatory anxiety approaches a ward patient and announces, "I'm going to hypnotize you," and the unprepared patient responds, "Doc, are you out of your mind?" we can conclude that the aura is minimal or nonexistent.

To illustrate the kind of interference in trance capacity that a more negative set of expectancies can produce, we have encountered a number of subjects who thought that they were not at all hypnotizable because of unsuccessful efforts by stage hypnotists. However, they proved to be quite hypnotizable with use of the HIP in the less coercive and more respectful atmosphere of the doctor's office.

Enhancement

The environment that is structured for the trance experience has inevitable physiological components that can be identified and enhanced. The operator can make use of naturally occurring physiological phenomena to create an atmosphere that heightens the subject's receptivity. For example, if the subject is asked to focus on a penciled dot, it is predictable that after some time he or she will develop diplopia and see two dots, then one dot again, then two again, and so on. This process induces fatigue and gives the operator the opportunity to introduce the next instruction—fatigue of the eyelids—by saying, "As you look at the dots, your eyelids will get heavier and heavier and it will be more difficult to keep them open, until eventually they become so heavy that you let them close." The operator is simply using natural physiological sequences and allowing the person to identify with them and accept the plausible interpretation that these events are occurring because of the message from the operator.

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This enhancement induction technique, only one of the many practiced by clinicians, is an example of how the therapist can use physiological phenomena to both encourage the subject to pay attention to his or her own body and help him or her discover his or her own flexibility in altering somatic sensations. Milton Erickson (1967), in particular, was a master at subtly mobilizing psychological expectancy and physiological phenomena for the purpose of maximizing hypnotic compliance. At some point in this process of exploration, the subject takes the plunge into the formal trance state.

The Plunge

The plunge is the actual transition from ordinary scanning awareness to maximal trance capacity. It can be used to characterize any technique that encourages the subject to direct his or her attention to the best of his or her ability. In maximally focusing on a specific sensation, he or she cuts loose from the usual mixture of somatic and environmental percepts that occupy part of his or her attention. Thus, in the dialectical relationship between focal and peripheral awareness, the plunge represents the individual's optimal shift toward focal attention, with a necessary and concomitant constriction of peripheral awareness. The plunge may take the form of paying attention to a sense of floating into the chair, a sense of lightness in one's arm, or a sense of heaviness in one's limbs. This guided experience involves maximizing focal attention with a relinquishing of peripheral distractions.

Overwhelming evidence in the literature indicates that some people consistently perform the plunge better than others as measured in a number of ways (Hilgard 1965; Morgan et al. 1974a). In virtually identical settings, with the same aura and psychophysiological enhancement, the nature of the plunge for each individual is different hence, our reference to Socrates that "seeking and learning is all remembrance." What is discovered when a trance is formally elicited is an inherent capacity in the individual. This capacity is expressed in conjunction with the nature of the induction and, thus, may vary somewhat from time to time. As a generalization, however, it is clinically most useful to assume that the majority of the variations in response are related to the capacity of the individual. What the individual discovers when taking the plunge is not some totally new experience, as he or she often expects, but the rediscovery of his or her own capacity—the individual learns what he or she already knew. The hope is that, in the service of a good therapeutic strategy, the subject will be able to make better use of his or her existing trance capacity. Any individual is capable of experiencing a shift in the interaction between focal and peripheral attention. However, the hypnotic experience is uniquely characterized by a sustained shift toward focal attention in response to a signal.

Both the capacity for hypnosis and the phenomena associated with it seem to have such a fixed and determined quality that metaphors that involve neurophysiological functioning or very early learning are most appropriate to explain them. Some studies indicate a significant heritability of hypnotizability (Duke 1969; Morgan 1973). A number of features of the trance state are reminiscent of imprint learning as described by Hess (1959). Imprint learning is different from associative learning in at least four distinct ways:

- 1. For associative learning of a specific discrimination, recent experience is maximally effective. Primacy of experience is the most important factor in imprint learning.
- 2. In associative learning, painful or punitive stimulation results in avoidance. In imprint learning, this stimulus increases the effectiveness of the imprint experience.
- 3. In associative learning, visual discrimination develops more rapidly and is more stable when the training periods are interspersed with rest; imprint learning is more effective when the exposure is not interrupted by rest periods.
- 4. A drug such as meprobamate permits ducklings, for example, to learn color discrimination as well as or better than they normally do, whereas the same drug reduces their imprint learning to almost nothing.

Thus, these experimentally determined characteristics enable recognition of two significantly different types of learning, each with its own set of rules. The difference is so fundamental that the imprint type of learning can be viewed as a foundation experience on which subsequent learning and personality development are based. For our purposes, imprint learning in humans cannot be viewed as an exact replication of the process observed in birds, but it is a useful concept in classifying a general category of learning that is not explained by the usual associative learning concepts.

It is apparent that all animals learn by means of imprinting as well as by associative processes. Even behavior that has been traditionally

regarded as innate or instinctive may now be understood in terms of the species-specific kinds of learning acquired at critical and appropriate times early in the life cycle. The acculturation process that happens in children before they master language may occur predominantly in the imprint mode. It is intriguing to speculate whether certain characteristics, such as receptiveness to the trance experience, are the result of certain early imprintlike experiences.

In particular, the sensorimotor alterations that characterize the trance state constitute a specific kind of language of action that makes sense to certain individuals and seems like a foreign language to others. This language is characterized by primitive, archaic, or paleological thinking (i.e., predicate-predicate rather than normal subject-predicate identification as described by Von Domarus and later by Arieti) (Arieti 1962) and is rather like unconscious or dream language. In such thinking, temporal or spatial relatedness implies causation. Feelings are not distinguished from acts. One value of identifying this mode of thinking as distinct from the conventional and more sophisticated mode is that it may help in ascertaining the appropriate type of treatment intervention (discussed in Chapter 20, Hypnosis in the Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder, and Dissociation). The trance state may indicate the capacity of an individual to return to an early foundation-experience type of learning, to a logic of experience and sensation rather than thought.

Age Regression

Some highly hypnotizable individuals are capable of age regression in the trance state in which they relive some part of their life as though they were at that age. When tested, they respond to vocabulary questions like 2-year-olds, deny knowledge of the current president, and giggle when tickled as though they were children. Some even become nonverbal when regressed to age 6 months and may, without specific instruction, develop the grasp and rooting reflexes that characterize the partially developed nervous system of an infant. Many such individuals seem to retain layers of memories analogous to the layers of a city uncovered by archeologists. These primitive reflexes and childish emotional responses remain stored in the unconscious, and in some individuals they may be tapped using hypnosis (H. Spiegel et al. 1945), as in the following example.

A 25-year-old man was hypnotized in a demonstration of hypnotic age regression. When he was regressed to various ages, he responded without difficulty, until he was signaled to place himself back to his twelfth birthday. When asked for his name (as was done previously at older age levels), he responded with some confusion and tension but did not answer. When pressed for an answer, he looked about and inquiringly uttered a word that sounded like "Vas?" It then became apparent that he did not understand English, and he had been saying "What?" in German ("was" pronounced "vas"). A third person who spoke German served as translator. The subject seemed quite relieved, and the interview and planned test program continued. The interpreter was subsequently necessary for every age level up to and including the thirteenth birthday. At age 13 years, he had escaped from Vienna to the United States, and by the time he was 25 years old, his fluent English showed no trace of his native German tongue—a language that he had learned to despise to the extent that he had difficulty with both speaking and understanding it. Even his handwriting reverted to German script at any age younger than 13 years. From age 13 to 18 years, while under hypnotic regression, his spoken English revealed a gradually disappearing German accent.

Yet, despite this need to use an interpreter when interviewing him at ages younger than 13 years, he could understand and respond without evidence of confusion to instruction related to his state of trance. For example, while being interviewed at the 10-year-old level, he was told, "When I touch your forehead, your eyes will close" and "You are now going back into the years; you are now 6 years old—this is your sixth birthday." His response was so clear that there was no doubt whatsoever that he understood exactly what was said. Again, at the 6-year-old level, when asked, "How old are you?" he looked around with confusion and asked, "Vas?"

This case illustrates both the layering of memories that are later tapped by the trance regression and the dual focus that characterizes the trance. The subject relived the world as he had experienced it at age 12 years in German and at the same time understood trance instructions in English as a 25-year-old adult. This rather strange situation seemed to provoke little tension or puzzlement for the subject.

For reasons that are not clear, some individuals may retain their precognitive capacity to relate in an intense way to sensorimotor experience, whereas others lose or so thoroughly transform their precognitive capacity into cognitive terms and functioning that it becomes more or less inaccessible. Influences that occur at an imprintlike level may in part be responsible. In any event, the experiential intensity of the trance experience suggests an individual's capacity to get in touch with early foundation experiences. The importance of primacy (rather than recency) of experience for imprint learning and the important role of factors that make for a profound experience-such as pain and massive sensory input-combine to suggest that trance experience taps some earlier developmental experience. The ability to tap earlier developmental experience by trance experience seems to change relatively little over the adult life span except in cases in which psychological or neurological dysfunction is involved. It is becoming clearer, as we discuss in Chapter 5, The Person With the Problem: Apollonians, Odysseans, and Dionysians, that the trance mode involves a different kind of language from our usual cognitive verbal functioning.

Summary

Hypnosis is essentially a psychophysiological state of aroused, attentive, receptive focal concentration with a corresponding diminution in peripheral awareness. The capacity for this state varies among individuals and is relatively fixed throughout the adult life cycle. This capacity may be genetically determined or perhaps learned early in life, and it can be tapped and invoked in three ways: spontaneously, in response to a signal from another person (formal hypnosis), and in response to a self-induced signal (self-hypnosis).

A spontaneous trance can be either internally aroused (e.g., daydreaming, fugue state [see Chapter 1, Naturally Occurring Trance Phenomena and Related Myths]) or instigated by external cues (e.g., fear, seduction, intense concentration). The individual is generally unaware of his or her shifting into and out of this kind of trance experience, and hence it is unstructured and undisciplined. For example, a person can become so absorbed in watching a movie that he or she is surprised to discover where he or she is when the show ends.

Formal hypnosis differs from spontaneous trance in that it is contextually an interpersonal mode of communication. The subject maintains a sensitive, attentive responsiveness to an operator during the trance state. Technically, the authentic hypnotic experience can be defined as formal hypnosis only when it is knowingly induced by the operator; responded to by the subject in a sensitive, disciplined way; and terminated by the operator's signal. Using the HIP, one ceremony for signaling trance, the operator actually tests for trance capacity and, while measuring it, simultaneously enables the subject to identify this special state of attention as hypnosis. The operator can, when relevant, instruct the subject to shift knowingly into the hypnotic state (self-hypnosis), which differs from spontaneous trance in that it is effected by the individual's conscious design. Self-hypnosis can be learned by instruction or discovered intuitively. It is instigated and terminated by the subject him- or herself rather than another person.

In reality, all hypnosis is a form of self-hypnosis. In the formal induction of a trance, an individual enters a state of sustained, attentive, receptive concentration, in response to either an inner signal or a signal from another person, that activates this capacity for a shift of awareness and permits more intensive concentration in a designated direction.

In Chapter 3, Rationale for a Clinical Test, and Chapter 4, Administration and Scoring, we describe the HIP, a clinically useful method for rapidly inducing the trance experience and systematically measuring the individual's response to it. This page intentionally left blank

The Hypnotic Induction Profile

CHAPTER 3

Rationale for a Clinical Test

When you cannot measure it, when you cannot express it in numbers—you have scarcely, in your thoughts, advanced to the stage of Science, whatever the matter may be.

Lord Kelvin

Ceremony Versus Measurement

Ceremonies

There are literally hundreds, perhaps thousands, of more or less acceptable induction techniques that have been used over the past two centuries to elicit trance phenomena (e.g., eye fixation on fixed or moving targets; eye closure; body sway; touch by the hypnotist; evoking numbness, paresthesias, or paralysis; and counting up and down stairs). Most of the traditional induction ceremonies are thoroughly documented and described by Weitzenhoffer (1957) and Wolberg (1948) and require no further elaboration here.

What is relevant here is a clarification of the difference between the phenomenon of hypnosis itself and the ceremony that presumably elicits it. Trance phenomena may occur spontaneously or in response to a myriad of ceremonies of induction, as long as the

subject has hypnotic capacity and is not aesthetically offended by the ceremony.

By definition, a *ceremony* is an action usually performed with some formality, composed of symbolic elements that are not literally necessary to perform the task at hand. If the subject interprets the cues properly and responds as expected, the trance ensues. The three overlapping phases described in Chapter 2, Formally Induced Trance Phenomena—the aura, the psychophysiological enhancement, and the plunge—are, in effect, the common denominator usually apparent in all induction ceremonies.

There are many ceremonies for trance induction from different cultures that attract attention in the West and deserve mention here. Our hypothesis is that these ceremonies elicit trance concentration in people who have trance capacity. George Bernard Shaw defined a miracle as "an event that creates faith." Many different sorts of ceremonies can trigger a hypnotic response. Transcendental meditation, Zen meditation, the relaxation response (Benson 1975), some forms of biofeedback, yoga, trance dancing in Bali, religious conversion, faith healing, laving on of hands, and voodoo are just some of the examples of ceremonies that can elicit a trance experience. Although we have not been able to make careful comparative studies, we do have some data on the hypnotic component of acupuncture, which is reported in Chapter 15, Pain Control. We have studied those who have chosen different types of medical treatments in Nepal using the Hypnotic Induction Profile (HIP) (Biswas et al. 2000). We found that those who chose to visit a traditional Dhami-Ihankri healer, who enters a trance state with the patient, were significantly more hypnotizable on the HIP than those who went to a Western-style medical clinic or an Ayurvedic clinic. Furthermore, improvement and repeat visits were associated with higher hypnotizability. Thus, these patients seemed to select their medical treatment based on their intuition that they had the trance capacity to respond to a treatment that incorporated a trance experience.

Until recently, the clinical literature largely ignored the assessment of hypnotizability. In its place, there frequently has been reference to so-called deepening techniques (Erickson 1967), under the assumption that everyone is hypnotizable. These deepening techniques have, in our experience, been of little value. In general, if the setting is appropriate for both the patient and the therapist, the transformation into trance occurs quickly and to the person's optimal capacity. Repetition as a learning factor is usually of minor importance (Erickson 1967; Perry 1977). Although careful efforts to train higher hypnotizability do improve scores somewhat, pre-intervention hypnotizability accounts for most of the variance in final scores (Frischholz et al. 1982b). The trait outweighs the state manipulation.

What appears to be a deeper trance elicited by alleged methods is better understood as clarifying the patient's motivation or the relevance of hypnosis in the first place; correcting misunderstandings or aesthetic preferences of the patient; and altering expectations of the patient, the therapist, or both. Ceremonial repetitions provide a facesaving way to make these readjustments, and the trance then seems deeper, although it is the same when measured. In other words, the secondary issues that influence the context of the trance experience are clarified, but the patient's actual trance capacity remains essentially the same. *Clarifying the context* is probably a more precise label than *deepening techniques*.

From one point of view, the HIP (H. Spiegel 1974b) can be regarded as another ceremony. It is also more than just that, however. It is a measurement of hypnotizability in which a systematized sequence of instructions, responses, and observations are recorded with a uniform momentum in a standardized way, as the subject shifts into trance to the extent of his or her ability, maintains it, and then exits in a prescribed manner. Because the clinician's input is standardized, he or she can make the most out of variability in the subject's response. In effect, the hypnotist is the measuring instrument. The HIP differs from traditional clinical induction techniques in that it is a procedure that measures the flow of concentration as well as the transition into the hypnotic state. The HIP is time sensitive to the transition flow or a break in the ribbon of concentration that helps identify psychological health or illness. It differs from the research scales of hypnotizability in being brief, clinically appropriate, and able to provide so much information about the subject.

Once a hypnotizability score is determined, the disciplined HIP procedure is no longer necessary. In general, subsequent inductions can be generated by the patient or signaled by the therapist. The time for the shift into trance is a matter of a few seconds. The HIP is briefer and better standardized on a clinical psychiatric population as opposed to other clinical scales, which have been developed in an experimental laboratory population.

Measurements

What makes hypnosis a useful organizing concept in understanding its various ceremonies is the development of techniques for measuring a relatively stable trait—the capacity for hypnosis or hypnotizability. There are clinicians (Erickson 1967) and researchers (Barber 1956; Sarbin and Coe 1972) who maintain that there are no reliable differences in hypnotic capacity. However, the preponderance of research, including our own, indicates that hypnotizability is a stable and measurable trait (Hilgard 1965; Morgan et al. 1974b; Orne 1959; Perry 1977; H. Spiegel et al. 1976). This evidence provides an opportunity for the clinician to use the phenomenon in a disciplined and knowledgeable manner.

Several well-standardized scales of hypnotizability, hypnotic capacity, or hypnotic susceptibility have been developed (Barber and Glass 1962; Shor and Orne 1962; Weitzenhoffer and Hilgard 1959) with statistical reliability in mind. The scales were constructed as the summation score of a number of independent items, which, on testing, proved highly correlated (Hilgard 1965). The Harvard Group Scale of Hypnotic Susceptibility (Shor and Orne 1962) was designed so the subjects themselves could score it, which allows for group administration, but scores on this scale correlate highly with scores obtained on the same subjects using the Stanford Hypnotic Susceptibility Scale. These measures are lengthy to administer, requiring approximately 1 hour.

The HIP is moderately and positively correlated with the Stanford Scales, with a range of correlations between 0.45 and 0.60, similar to the correlation of any one item of the Stanford Scale to the total score (Frischholz et al. 1987; Orne et al. 1979). The late Ernest Hilgard once commented that "the Stanford Scales are easy to understand and hard to pass. The HIP is hard to understand and easy to pass. I think the Stanford Scales emphasize compliance and the HIP emphasizes comprehension." This was one of Professor Hilgard's many astute observations. The Stanford Scales were designed to focus on behavior: If the subject's arm felt heavy, it would drop. The HIP was designed to emphasize a shift in perception and subjective experience, which can be recognized by the subject and scored by the operator. Does the subject's hand feel dissociated? Is its movement experienced as involuntary? Thus, there are similarities and differences between the two measures that are predictable based on their unique as well as common characteristics.

The HIP measures the integrity or break in the flow of attention and concentration, a characteristic not measured by the Stanford Scales. Our research has demonstrated that a break in the ribbon of concentration, an absence of flow, is an indicator of a functional or organic pathology. Another important difference is that the HIP differentiates more qualitative differences in those who are highly hypnotizable, whereas the Stanford Scales differentiate more distinctions among those who are at the low end of hypnotizability.

There is strong evidence that hypnotizability is an extremely stable trait. Piccione, Zimbardo, and Hilgard (1989) tracked down 50 former Stanford undergraduates and blindly retested their hypnotizability on the Stanford Scales. The test-retest correlation over a 25-year interval was 0.71, which is higher reliability than one would observe in IQ over such a long interval. The finding means that one can predict half the variance in hypnotizability a quarter of a century later by knowing a subject's baseline hypnotizability score.

There was a need for a briefer measure of hypnotizability that would be practical and appropriate to the pressures of clinical work and yet reliable and valid as a measure of the hypnotizability trait. As more and more researchers began to recognize trance capacity as an important concept, it became imperative to introduce the idea to the field of clinical practice, which was still dominated by thoughts of altering hypnotic depth, considering all patients to be good candidates for hypnosis, or accusing patients of "resistance" if they did not enter hypnotic states. The Hilgards introduced two briefer scales: The Stanford Hypnotic Clinical Scale, which takes approximately 20 minutes (Hilgard and Hilgard 1975), and the Stanford Hypnotic Arm Levitation Induction Test (Hilgard et al. 1979), which takes 5 minutes. Like the parent scales, these are additive measures with a series of ideomotor and challenge items.

From a clinical point of view, there remained a need for an even shorter test of hypnotizability that would provide systematic information and at the same time facilitate the therapeutic atmosphere. The longer laboratory measures were not used by busy clinicians and raised the additional problem of the development of fatigue during the testing. Context and motivation are critical factors in any psychological measurement. Tests standardized on subjects volunteering for the sole purpose of hypnotic experimentation measure different dimensions than those standardized on people presenting themselves for treatment (Frankel and Orne 1976). In the clinical context, assessment of hypnotizability is incidental to the treatment encounter, and motivation is likely to be greater because the patient is seeking help with a personal problem rather than exercising curiosity. In this sense, paid volunteers for experimentation have a significantly different motivational set. Tests standardized on college student populations often reflect concern with only a limited sample of age and education; however, the concern of the clinician must relate to the wide range of characteristics of a patient population.

Some earlier tests identified hypnotizability as "susceptibility," a description that offended many patients and hampered their cooperation. Presenting hypnotizability as a capacity or talent serves to avoid this impediment to patient acceptance. The traditional use of sleep terminology in earlier tests was also misleading and did not convey the therapeutically useful mobilization of concentration that characterizes trance. Some of the challenge items, such as an insect hallucination, at times proved to be aesthetically disturbing to patients seeking relief from symptoms. Because hypnosis is an expression of integrated concentration, factors that impair concentration, such as drugs, psychopathology, and neurological deficits, should be taken into account but were not in the standardization of the laboratory measures.

A chemical analysis of food, no matter how accurate, in no way identifies and differentiates gourmet from institutional cooking. The unique gourmet quality is missed by the analytic measurement, yet it is a quality identified by the trained palate. In the same manner, no measurement of hypnotizability is the same as the entire phenomenon itself, and any test reflects the context of the experience and has inherent limitations and advantages. Given that any test is at best a sampling and imposes distortions on the data it measures, and given the preceding considerations, it seemed necessary to develop and standardize a test within the clinical context.

The HIP was developed in the 1960s in an effort to resolve these difficulties. It consists of three major components:

- 1. The eye-roll (H. Spiegel 1972), a biological measurement that records presumed biological trance capacity
- 2. Subjective reports of hypnotic experience, including dissociation, involuntariness, and sensory alteration
- 3. Behavioral change, including response to a challenge to arm levitation and response to a cut-off signal ending the hypnotic experience

The HIP test yields information on a subject's hypnotizability sufficient to make a clinical decision regarding the role of hypnosis in treatment. The HIP was developed to create a scale with rich relationships to treatment outcome and psychopathology factors as well as hypnotizability per se. We present data in this chapter regarding relationships between performance on the test and such factors as personality traits and degree of psychopathology.

The relationship between the HIP and the Stanford Hypnotic Susceptibility Scale is moderate, with observed correlations ranging from 0.35 to 0.60 (Frischholz et al. 1980; Orne et al. 1979). These significant correlations indicate that the scales are in the same domain but do not measure exactly the same thing. It is worth bearing in mind that any one item of the Stanford Hypnotic Susceptibility Scales correlates only approximately 0.60 with the overall score (Hilgard 1965).

Introduction to the Hypnotic Induction Profile

The HIP was developed to provide a useful measure in the clinical setting. It evolved out of a need for a rapid induction and testing procedure that could be easily integrated into the clinical diagnostic interview, so that trance capacity might then be quickly used in treatment.

The HIP postulates that hypnosis is a subtle perceptual alteration involving a capacity for attentive, responsive concentration that is inherent in the person and can be *tapped* by the examiner. The hypnotic induction becomes a deduction. A rapid procedure, the HIP takes 5–10 minutes to administer. It is both a procedure for trance induction and a disciplined measure of hypnotic capacity standardized on a patient population in a clinical setting.

The HIP assesses a single trance experience as it flows through the phases of entering, experiencing, and exiting the hypnotic state. The test also establishes a structure for this sequence. The specific point in time at which the shift from customary awareness into trance takes place varies from person to person. However, the trance experience is punctuated, tapped, and divided into phases by the 10 individual items lettered A and D–L on the HIP score sheet. Item D is the sum of items B and C (Figure 3–1). Six of these items (D, G, H, I, J, L) are used for rating the subject's trance capacity


FIGURE 3-1

and for scoring the HIP according to the induction- or profile-scoring method. The remaining four items (A, E, F, K) round out the clinical picture and establish the procedures for entering and exiting trance as well as subsequent self-reporting. Scoring these four items is optional because they are not part of the original HIP summary scores. These optional items are scored on the more recent 16 scale (see Appendix). The 16-scale technique induces the subject to enter the hypnotic trance quickly under observed, specified conditions and then to shift out of trance on signal. At the same time, the HIP teaches the subject to use his or her own cuing system for entering and exiting trance. Thus, as the examiner observes and measures trance capacity, the subject can learn to identify the trance experience to initiate and use it independently (self-hypnosis) in the service of relevant goals.

The trance experience can be divided into four phases for measurement (Table 3-1). The first is a pretrance or preinduction phase, which lasts until eve closure. The second is the induction or entering phase, during which instructions are given for the individual to shift into formal hypnosis. The shift may take place in response to the examiner's directions and, as part of this induction ceremony, instructions are given for responsivity. The induction ceremonial phase and formal trance are terminated with the opening of the eves, but hypnotic trance persists, and the third phase begins. The third is a *postinduction* or *postceremonial* phase, during which the person may or may not actually experience the following five responses to the instructions given as part of the induction ceremony: dissociation: signaled arm levitation: a discovery of a sense of differential control; response to the cut-off signal ending the hypnotic experience; and a sensory alteration involving floating, lightness, or buovancy (see Figure 3–1, Items G–I and L). It is important to note that what are often called *posthypnotic phenomena* actually represent the experience of hypnosis. Posthypnotic is a traditional label that can be confusing. A more appropriate label may be postceremonial or postinduction.

Item J (cut-off) of phase three is the exiting procedure. Although the subject is out of formal trance and his or her eyes are already open, this period of postceremonial trance response must be terminated by the examiner touching the subject's elbow. A fourth *postexperiential*, nontrance phase comprises self-reports by the subject.

Measurements of up-gaze (Item A), the eye-roll sign (Items B, C, and D), and instructed arm levitation (Item E) supply an evaluation of inherent potential or capacity for success in initiating and sustaining the trance experience. They also comprise the induction procedure. Actual success in maintaining the trance experience, once it has been effected through specific instructions, is tapped by dissociation (Item G), signaled arm levitation (Item H), control differential (Item I), cut-off (Item J), and float (Item L). These five measurements taken

TABLE 3-1

Four Phases for Measurement of the Hypnotic Induction Profile

	The 4 phases	Items that tap t	he 4 phases
1. Preinduction	Pretrance or precere- monial; state of cus- tomary awareness	Up-gaze*	(Item A)
2. Induction	Ceremony for enter- ing formal trance with eye closure	Eye-roll sign	(Items B, C, and D)
	Instructions for post- ceremonial respon- sivity; exit the formal trance with eye opening	Instructional arm levita- tion*	(Item E)
3. Postinduction	Postceremonial trance with open eyes; postceremonial responsiveness or experience tapped by items F–J	Tingle*	(Item F)
		Dissociation	(Item G)
		Signaled arm levitation	(Item H)
		Control differ- ential	(Item I)
	Exit total program with examiner's touching of sub- ject's elbow	Cut-off	(Item J)
4. Postinduc- tion; postex- periential	After trance; state of	Amnesia*	(Item K)
	customary aware- ness; retrospective aspects of the trance experience	Float	(Item L)

*Recording a score for this item is optional.

together rate the degree to which the subject can attentively focus: They constitute the induction score (Table 3–2). The profile score is a statement of the relationship between a person's potential for trance and his or her ability to experience and maintain it. Exactly what this relationship means and how it is determined is discussed in Chapter 4, Administration and Scoring.

TABLE 3-2

Items of the Hypnotic Induction Profile Scale

Dissociation	"Spontaneous," uninstructed. Score positive (1 or 2) if subject reports that the arm used in the preparatory levitation task feels "less a part" of the body than the other arm, or if that hand feels "less connected to the wrist" than the other hand.
Signaled arm levitation (Lev)	Score positive if on the instructed signal, the arm rises to upright position. Positive scores vary from 1 to 4, depending on the number of verbal reinforcements necessary.
Control differential	"Spontaneous," uninstructed. Score positive (1 or 2) if subject feels less control over the arm used in the Lev item. The examiner's questions do not indicate which arm is expected to be less controllable.
Cut-off	Score positive (1 or 2) if, on instructed signal, subject reports normal sensation and control returning to arm used in Lev item.
Float	Score positive (1 or 2) if subject reports having felt the instructed floating sensation during the administration of the Lev item.

General Considerations

The HIP is best described as an objectively scored, interpersonal hypnotic interaction that also serves as an induction technique. To obtain results comparable to the standardization data, *momentum* or *rhythm* must be established and maintained during the interaction: There should be no long silences or pauses during test administration or conversation that diverts from the protocol of each item, and the pace should not be so rapid that the subject does not have a chance to attend to the experience. If administered correctly, the test requires 5–10 minutes.

The HIP requires that the operator have a degree of expertise and familiarity with the test, which is not required when using other tests of hypnotizability. *The examiner is the instrument*, and if he or she is not finely tuned, the HIP is not valid. Administering the HIP requires a stance of neutrality. Persons new to the HIP should not expect to be able to master the technique immediately. They should be aware that several—perhaps many—practice administrations are a requisite to

valid clinical or experimental application. At the same time, because the induction is standardized and is intended to instruct rather than convince the subject to respond, it can be effectively administered by clinicians with comparatively little experience with inducing hypnosis. The object is to discover the subject's biological capacity and psychological responsivity. The protocol may be read initially rather than recited from memory. Those more experienced in the use of hypnosis may find the HIP a rather different form of hypnotic induction that is highly structured but less demanding of infinite variation to formulate appropriate treatment strategies.

These qualities of the HIP have been preserved because the test is primarily a clinical instrument that was developed in the course of clinical practice. In the clinical setting, especially during the initial encounter in which the HIP is usually used, rapport is encouraged and nurtured by the attentive momentum of the examiner. Although the HIP items and even the wording of the test (insofar as this is possible) should be the same in each case, the particular responses of the subject are acknowledged and woven into the fabric of the interchange by the various items.

In Chapter 4, the administration and scoring of the HIP are presented. Read the instructions given by the examiner for a single HIP item and the accompanying directions on scoring. When the connections are clear between the administration of the test and the behaviors and experiences to be observed, read the italicized administration instructions only without interruption. With the concurrent scoring by the examiner in mind, this uninterrupted reading should begin to communicate a sense of the rhythm of administration.

The physical setting can enhance the psychological one. Shifting into a state of peak responsiveness is in a sense "shifting gears," and the physical arrangement may reflect this. For example, during an initial clinical interview, the clinician may be seated in his or her customary place across the desk from the patient (or subject) or in an armchair across the room. However, at the time of induction, the clinician shifts position, moving to another seat slightly forward and to the left of the patient. During the induction procedure, the clinician should be close enough to the patient to establish comfortable physical contact, as shown in Figure 3–2. After completing the procedure, the examiner may return to his or her customary seat.

Throughout these instructions, it is presumed that the examiner will sit to the left of the subject, causing the subject's left hand to levitate. If the examiner sits to the right of the subject, right should be



substituted for left in the examiner's instructions. In general, the subject should be seated comfortably with a place to rest his or her arms and legs. Some testers find that the use of a footstool enhances the initial floating sensation that many subjects experience during hypnosis. If an armchair is not available, have the subject sit next to a table with his or her arms placed on the table, legs relaxed, and feet flat on the floor. Another alternative would be to ask the subject to imagine that his or her elbow is resting on an imaginary air cushion.

Until the examiner is comfortable with the procedure, he or she may find it helpful to keep the book open to Chapter 4, Administration and Scoring. Because this is an interpersonal interaction, eye-to-eye contact helps sustain the subject's attention even though the examiner may be referring to the instruction manual. This page intentionally left blank

CHAPTER 4

Administration and Scoring

This chapter details how to administer and score the Hypnotic Induction Profile (HIP). All instructions given by the examiner to the subject are printed in italics. Explanatory directions and remarks meant for the examiner are in regular type. Please note that the spatial divisions between the two types of print do not imply pauses in the procedure.

To prepare for administering the HIP, invite the subject to be seated in a matter-of-fact manner and gentle tone of voice. You may have already noted the subject's name, sequence (whether the subject has been hypnotized or taken the HIP previously and, if so, when), and position before "shifting gears."

Getting Started

Begin by asking the subject: *Are you right-handed or left-handed? Now, please clasp your hands together.*

Note whether the subject has his or her right thumb or left thumb on top. If he or she is right-handed and the right thumb is on top, this is considered a dominant handclasp. If he or she has the left thumb on top, this is a nondominant handclasp. If he or she is lefthanded and has the left thumb on top, this is also a dominant clasp. Usually, a dominant handclasp somewhat reduces the promise of the eye-roll component of the HIP, and a nondominant handclasp means that the patient will meet the full promise of the eye-roll.

Then, instruct the subject to: Get as comfortable as possible, with your arms resting on the arms of the chair.

This instruction provides an excellent opportunity to touch the subject's left arm by actually placing it on the chair, gently but firmly. Touching as you begin immediately establishes touching as a standard part of the procedure so that it does not startle the subject later. Touch is used by the examiner to focus the subject's attention on physical sensations that may occur in response to verbal instructions. Touching also gives the tester the opportunity to actually measure the subject's physical response to some items on the test. For example, how light, heavy, stiff, or flexible the subject's left arm feels to the examiner is essential to measuring Item E, instructional arm levitation, on the HIP. Touching helps establish the examiner's connection with the subject. Remember that too soft and indefinite a touch may be seductive and distract the subject's attention rather than help focus it. Be firm and definite.

Hypnotic Induction Profile Items

Item A: Up-Gaze

Now look toward me. As you hold your head in that position, look up toward your eyebrows—now, toward the top of your head.

The subject should be on an equal level with you (face to face). Otherwise, the upward gaze appears to be greater if you are lower than the subject is or lesser if you are slightly above him or her. Without pausing, observe and measure the up-gaze according to instructions. This HIP item is a preparatory measure for the eye-roll sign and is not a part of the induction score or profile or induction summary scores. Up-gaze received a score until it was found that it had only a small correlation with the remainder of the scale. Although it is not necessary to score the up-gaze, it is essential that you administer the procedure. The eye-roll is awkward for some subjects, and separating it into the steps of up-gaze and then rolling down the eye-lids clarifies and simplifies the instruction.

Up-gaze is a measure of the distance, or amount of sclera relative to the size and shape of the eye, between the lower border of the iris and the lower eyelid as the subject is gazing upward. You are *not* measuring how much of the cornea disappears under the upper eyelid, but rather the amount of sclera rising from below.

Up-gaze can be scored 0, 1, 2, 3, or 4, according to Figure 4–1:

- Score 0 when there is no sclera between the two borders.
- Score 1 for any amount of sclera, however small, between the two borders.
- Score 2 when the distance falls below or approximately on the midline of the eye. *Midline* is an imaginary horizontal center that runs between the inner and outer corners of the eye.



EYE-ROLL SIGN FOR HYPNOTIZABILITY

FIGURE 4–1

- Score 3 when the amount of sclera reaches a little above the imaginary midline.
- Score 4 when the amount of sclera rises far above the midline.

Recording the score is optional; if you wish to do so, record your measurement on the score sheet by circling 0, 1, 2, 3, or 4 under Item A. Because the amount of up-gaze is not always clear-cut, two numbers may be circled to represent the measurement (e.g., 1–2 instead of 1 and 2). However, it would not be correct to circle 0–1, because any sclera showing between the two borders would be recorded as 1. As some subjects attempt to gaze directly upward, both irises may slant inward. See Item C: Squint.

Item B: Roll

As you continue to look upward, close your eyelids slowly. That's right... close. Close. Close.

Item B begins the induction procedure and is an important part of the profile grade. The eye-roll is a measure of the distance, or amount of visible sclera between the lower border of the iris and the lower eyelid, exhibited when the subject simultaneously gazes upward as high as possible and slowly closes the eyelids (Figure 4–2).

As the eyes are closing, score 0, 1, 2, 3, or 4, according to Figure 4–3:

• Score 0 when there is no sclera apparent between the two borders.



EYE-ROLL MEASUREMENT



EYE-ROLL SIGN FOR HYPNOTIZABILITY

FIGURE 4–3

- Score 1 for a minimal amount of sclera visible.
- Score 2 when the amount of sclera approaches the imaginary midline of the eye.
- Score 3 when the amount of sclera rises a little above the midline.
- Score 4 when the amount of sclera rises far above the midline and the iris almost disappears immediately under the upper eyelid.

Record the measurement on the score sheet as described for upgaze.

It is not unusual for a subject's eye-roll to measure naturally lower or higher than his or her up-gaze. However, the potential capacity for eye-roll, up-gaze, and squint may be misrepresented by myopia or previous eye operations that limit extraocular mobility. Always ask the subject about these possibilities when the score for eye-roll is 0 or markedly lower than the signaled arm levitation score (Item H). Also, contact lenses make up-gaze and simultaneous eye closure uncomfortable. Be sure that the subject removes contacts before the induction procedure.

Item C: Squint

Occasionally, as a subject attempts to gaze upward and/or close his or her eyelids, both eyes may veer inward, thus causing an internal squint, or what ophthalmologists call an "A-pattern." It is not important if such a squint occurs with the up-gaze, but it adds to the score of the roll. You have to be quick to catch it if it occurs. Note and score a squint 1, 2, or 3, according to Figure 4–4.

Normally, both eyes must veer inward simultaneously to constitute a squint. If one eye squints and the other (presumably not myopic) eye does not, only the amount of the higher roll of the two eyes is recorded. It is not unusual for a subject to squint internally as part of the up-gaze and not as part of the eye-roll, or vice versa. However, it is only important to record the squint as part of the eye-roll sign.

Item D: Eye-Roll Sign

The eye-roll sign is part of the HIP scoring procedure only. It includes the procedures for Items B: Roll and C: Squint.

Our hypothesis is that the eye-roll sign, a measurement of mobility in extraocular eye movements, taps inherent potential capacity for experiencing hypnosis. It is part of the profile grade. The sign consists of the roll and squint measurements added together. For example, a roll of 1 and a squint of 1 make up an eye-roll sign of 2. A subject's eye-roll sign of 2 also may consist of no observable squint and a score of 2 on the roll, or a roll of 0 and a squint of 2. Most often, though, a roll with no squint is found. It is sometimes observed that the score for the eye-roll sign remains stable and the scores for its two components vary (e.g., on the first examination, a subject



EYE-ROLL SIGN (SQUINT)

FIGURE 4-4

shows a 2 roll and a 1 squint; on the next examination, he or she shows a 1 roll and a 2 squint).

The eye-roll sign does not change over time for a given subject. You may choose to go through the procedure of eye-roll during induction without scoring the sign. After completing the HIP, you may observe the eye-roll sign again as many times as necessary to obtain a score. Accurately rating eye-roll signs takes a great deal of practice. You may not feel confident in judging them until you have seen 50–100.

Item E: Arm Levitation Instruction

Scoring the arm levitation instruction item is optional. However, it is necessary for you to administer this procedure.

Many clinicians find the item useful to rate because arm levitation tends to be a clinical indicator of a person's potential for initiating and sustaining the hypnotic trance experience. The subject's movement may start in the fingers and spread to the hand and the wrist; then, the whole forearm may rise into an upright position.

The operator's objective measurement (noting the amount of verbal encouragement) and his or her subjective one (feeling the weight and resistance of the subject's arm) are equally important.

Keep your eyelids closed and continue to hold your eyes upward. Take a deep breath, hold.... Now, exhale, let your eyes relax while keeping the lids closed, and let your body float. Imagine a feeling of floating, floating right down through the chair. There will be something pleasant and welcome about this sensation of floating.

By instructing the subject to float downward instead of upward, you contradict the usual expectations concerning the state of floating and casually introduce a paradox, the acceptance of which may be a part of the hypnotic experience. You also fix the subject's attention on your voice and on your instruction to him or her. Often, someone with a high trance capacity (an intact grade 3 or 4 person) has already "floated away," and you are refocusing his or her attention with the contradiction.

As you concentrate on this floating, I am going to concentrate on your left arm and hand.

Gradually place your hand gently and firmly on the subject's wrist as an indication that you are going to use touch next as an instruction. Be careful not to startle the subject with a sudden touch that may jolt him or her. If you find this awkward at first, verbally indicate that you are going to touch him or her.

In a while, I am going to stroke the middle finger of your left hand. After I do so, you will develop movement sensations in that finger. Then the movements will spread, causing your left hand to feel light and buoyant, and you will let it float upward. Ready?

Move your hand away from the subject's wrist, and stroke the middle finger of the left hand, beginning at the fingernail and moving along the back or top of the hand and then up along the forearm until you reach the elbow. Again, be firm but not hard or harsh. Pressing downward slightly may encourage the opposite response—rising upward—in the subject's left hand and forearm. If there is an immediate response—movements in the fingers and hand that spread so that the forearm rises into an upright position—proceed to: *Now I am going to position your arm in this manner, so...* and continue from there. If there is no immediate indication of arm levitation in response to stroking the arm, give this additional instruction as encouragement:

First one finger, then another. As these restless movements develop, your hand becomes light and buoyant, your elbow bends, and your forearm floats into an upright position.

As you say this, gently and gradually encircle the subject's wrist with your thumb and forefinger, and give the arm a little lift. Note that this physical encouragement may be as effective an instruction for some subjects as the verbal instructions are for others. Both are integral means of teaching the subject what arm levitation is. If the subject takes over the upward movement by him- or herself and sets his or her own momentum, you may either keep your hand around the subject's wrist as a guide or, once the subject gets started, let go. If the arm moves into position, proceed to: *Now I am going to position your arm in this manner, so....* If not, continue to lift the arm lightly upward as you give the further instructions.

Let your hand be a balloon. Just let it go. You have the power to let it float upward. That's right! Help it along! Just put it up there.

It is essential for the subject's hand and forearm to go into the upright position, even if you have to tell the subject to put it up or if you have to guide it all the way. However, recording the score for Item E is optional:

- Score 4 if there is immediate response to stroking the subject's arm (i.e., the subject begins arm movement upward into an upright position and sets the momentum of rising in immediate response to being stroked). The arm probably looks weightless and rises easily and smoothly. The movement should be completed without further instruction. The subject may be very surprised or even afraid of what the arm has just done.
- Score 3 if the subject's forearm begins and sets the momentum for rising into the upright position within a few seconds of your giving the first additional instruction. Completing the movement into position may take longer, but after being given a boost by the operator, the momentum must be set by the subject. The subject usually

sets the momentum for the upward movement without difficulty, but the examiner's thumb and forefinger may continue to encircle the subject's wrist. The subject's arm may feel light, even weightless, and not resistant to the operator.

- Score 2 if the operator gives further verbal instruction and more of a boost before the subject takes over. The subject's arm may feel heavy and perhaps at first be somewhat resistant to the tester.
- Score 1 if the subject's arm is even more resistant and if the examiner actually must place the subject's forearm into the upright position.
- Score 0 if the subject is so adamant that movement is resisted, even with help from the examiner. No further testing is then possible. Score the profile by recording the eye-roll score as 0 and by noting this abrupt end point. This situation rarely occurs.

The arm levitation measurement is not clear-cut but rather is on a continuum. For example, the movement may begin in the subject's fingers and spread to his or her hand after the first additional verbal instruction but then stop, in which case more encouragement is required to complete the movement into the upright position. Such a measurement would be recorded as 2–3. Or, a subject may complete the movement without being told to "just put it up" but take approximately 10–15 seconds. The measurement would be recorded in the same way—by circling 2 and 3. Be loose about it; the "soft focus" approach is best. Use your clinical judgment, and remember that it takes time and practice to get a feel for this measurement.

When the subject's forearm reaches the upright position, say: Now I am going to position your arm in this manner, so.... And let it remain in this upright position.

Establish the position now by gently cupping the subject's elbow with both hands, positioning it in comfortable alignment with the chair arm, and flexing the hand forward (Figure 4–5). It is essential to present the following instructions verbatim, because scores on the remaining items depend on the extent to which the phenomena described in these instructions are actually experienced and reported by the subject. Note that you are instructing the subject to do the following: 1) allow his or her arm to remain in an upright position, 2) allow the arm to levitate after you pull it down, and 3) feel "usual" sensation



return in response to touching the left elbow. Earlier, you instructed the subject to feel a "lightness or buoyancy," a sensation that is also tested later. All of the following instructions are for postinduction (or postceremonial) responsivity; they are given during formal trance and eye closure and while the arm is in the instructed upright position.

In fact, it will remain in that position even after I give you the signal for your eyes to open. When your eyes are open, even when I put your hand down, it will float right back up to where it is now. You will find something pleasant and amusing about this sensation. Later, when I touch your left elbow, your usual sensation and control will return. In the future, each time you give yourself the signal for self-hypnosis, at the count of one your eyes will roll upward and by the count of three your eyelids will close and you will feel you are in a relaxed trance state. Each time you will find the experience easier and easier. Now I am going to count backward. At two, your eyes will again roll upward with your eyelids closed. At one, let them open very slowly. Ready.... Three, two, with your evelids closed roll up your eyes and one, let them open slowly. All right, stay in this position and describe what physical sensations you are aware of now in your left arm and hand.

These are the instructions for exiting from the formal trance ceremony. Note that just the induction ceremony is cut off, not the trance itself. The subject may now shift into a phase of postceremonial trance. Eye opening marks the end of the trance ceremony and the beginning of the postinduction phase. Introduce the following items by first asking: *Is it comfortable?*

Item F: Tingle

Are you aware of any tingling sensations?

You may substitute "pins and needles" for "tingling" if you wish. The subject's responses are not used in the HIP induction score or profile grade. Responses are noted by checking off the response on the score sheet, and recording the score is optional. Tingle is a clinical postinduction indicator of the subject's sensory experience—that is, of how much of a "tingling" or "pins and needles" sensation the subject reports that he or she is experiencing. The procedure is included because some subjects mistake a tingling sensation for a control differential (Item I). By asking about tingle now, you make it clear to the subject that a later sensation of "pins and needles" does not indicate a sensation of control differential.

- Score 2 if the subject answers definitely "yes."
- Score 1 if the subject spontaneously qualifies by answering "a little bit" or "slightly"; if he or she indicates that the tingle is experienced in only one area of the body, such as his or her hand and forearm; or if you have to ask a second time before the subject reports tingling sensations.
- Score 0 if the subject indicates that he or she does not experience tingling.

Item G: Dissociation

Dissociation is a postinduction measure of the relative difference in the degree of connectedness that the subject may feel between the hand and wrist of the "hypnotized" arm versus the degree of connectedness felt in the hand and wrist of the "nonhypnotized" arm. Does your left hand feel as if it is not as much a part of your body as your right hand?

If the subject gives a definite "yes," go on to Item H. If he or she says "no" or gives a qualified "yes," say:

Does your left hand feel as connected to the wrist as your right hand feels connected to the wrist? Is there a difference?

If the "hypnotized" hand feels disconnected from the wrist, the score is high; if the sense of connection is the same in both arms, the score is low. The dissociation item contributes to the induction score. Score 0, or 1, or 2—never 1–2 or 0–1. Because dissociation is not an everyday experience, it is important to phrase the questions about it exactly as they are written.

- Score 2 if the subject answers definitely "yes" to your first inquiry—that is, if the left hand does not feel as connected to the body as the right hand does.
- Score 1 if the subject spontaneously qualifies his or her answer to the first inquiry (e.g., "a little bit") or if the subject answers "no" to the second inquiry.
- Score 0 if the answer is "no" to the first and "yes" to the second inquiry, indicating that the hands feel equally connected to the wrists.

Item H: Signaled Arm Levitation

To administer the signaled arm levitation item, take the subject's left hand in yours, touch his or her palm, and gently lower the subject's hand until it rests on the arm of the chair. Let go and quietly observe as you look pointedly at the subject's left hand for response. The method of administering the signaled arm levitation item is dependent on maintaining a *rhythm* in the hypnotic interaction. All of the instructions that follow are simply a detailed, standardized description of the method to be used in the maintenance of this rhythm. Remember that you are trying to obtain an estimate of the subject's degree of responsivity to hypnotic instruction.

Item H is broken down into five parts: the initial presentation of the signal and the four verbal reinforcements. You should proceed only as far as necessary for the subject to show complete arm levitation (as depicted in Figure 4–5). At that point, move on to control differential (Item I). Different subjects require a different number of reinforcements, varying from none to the maximum of four. There are three rules to use in deciding when to give another reinforcement:

- 1. Give reinforcement if there has been no arm movement in the 5 seconds after the previous reinforcement (or the initial signal).
- 2. Give reinforcement if movement began within 5 seconds of the previous reinforcement (or the initial signal) but halted before achievement of the instructed upright position.
- 3. Give reinforcement when the subject has shown continuous arm movement since the last reinforcement (or the initial signal), but the movement has been so slow that the upright arm position has not been achieved after 10 seconds. This rule has one exception: one waits only 5 seconds after the third reinforcement before giving the fourth.

Make sure to keep a close estimate of the time elapsed after each reinforcement; time elapsed is one criterion for scoring. You may wish to examine the example grid for scoring the arm levitation after you have read these instructions, because scoring and administration must be carried out simultaneously.

(First reinforcement) Now turn your head, look at your left hand, and watch what is going to happen.

This is the first reinforcement for signaled arm levitation. Although touching was used as part of the reinforcement for instructional arm levitation, do not use touch here.

(Second reinforcement) While concentrating on your left hand, imagine it to be a huge, buoyant balloon.

(Third reinforcement) Now, while imagining it to be a balloon, permit it to act out as if it were a balloon. That's right. Be "big" about it.

(Fourth reinforcement) This is your chance to be a method actor or a ballet dancer. Think of your hand as a balloon or as the arm of a ballet dancer and permit it to act as if it were a balloon. That's right, just put it up there, just the way a ballet dancer would.

Request that the subject put his or her arm up, even if he or she has to "fake it." You may even have to say: *Pretend*. It is not necessary for the examiner to touch the subject's arm or to put it in position at this point.

Again, before scoring, first study the following grid on which levitation scores are recorded, reproduced from the score sheet:

Levitation	no reir	nforcement	ר	3 - 4
(postinduction)	1st	н		2 - 3
u ,	<mark>⊰</mark> 2nd	н	7	1 - 2
	3rd	н		1 -
	4th	н	J	0 -
			2	

Two aspects of the subject's levitation performance may contribute to the levitation score: the number of reinforcements necessary for achievement of the instructed upright arm position and the time elapsed. The horizontal dimension on the scoring grid represents time. If, for instance, longer than 5 seconds is needed to achieve levitation during a second reinforcement, one moves leftward to the adjacent number on the second reinforcement row and circles it as part of scoring (see below for an example of this). The number of reinforcements is represented by the single number on the far right of each row. The number 4 refers to the initial signal, 3 refers to the first reinforcement, and so on. It may help you to think about the levitation score as a process of subtraction: Every subject begins with a score of 4 and loses parts of that score as reinforcements are used and time elapses.

The tester circles the reinforcement after which he or she sees the first arm movement, and he or she continues to circle reinforcements until he or she has circled the last one necessary for complete levitation. For example, if a subject shows no movement until the second reinforcement and then completes levitation within 5 seconds, circle 2 in the third row, like so:

Levitation	no reinforcement	3 - 4
(postinduction)	1st "	2 - 3
	-√ 2nd " >	1 - (2)
	3rd "	1 -
	4th "	0 -

Similarly, if the subject shows complete levitation within 5 seconds of the initial signal, circle 4.

More common is the situation in which movement begins after one reinforcement, but at least one more reinforcement is required for complete levitation.^{*} In this case, the examiner circles all of the relevant numbers. For instance, suppose that a subject shows no movement until the first reinforcement, and his or her response is slow enough to require a second reinforcement. However, within 5 seconds of the second reinforcement, the response is complete. This sequence is recorded as follows:

Levitation	no reinforcement	3 - 4
(postinduction)	1st "	2 3
	√2nd " >	1 - (2
	3rd "	1 -
	4th "	0 -

Again, the horizontal dimension on the scoring grid represents time. If levitation is completed within 5 seconds of the last reinforcement, then no more than one number per row is circled, as in the previous example. If full levitation requires 5-10 seconds, the tester circles both numbers on the line. For instance, if levitation begins within 5 seconds of the initial signal but is not completed until 10 seconds have passed, the score is recorded as follows:

Levitation (postinduction)	no reir 1st 2nd 3rd 4th	nforcement	$ \begin{array}{r} 3 - 4 \\ 2 - 3 \\ 1 - 2 \\ 1 - \\ 0 - \\ \end{array} $
	4th	"	0 -

^{*}See instructions on p. 64 for criteria to be used in deciding when to give another reinforcement.

Similarly, if levitation begins after the second reinforcement but is not complete until 10 seconds have elapsed, score the sequence as follows:



Note that a score of 0-1 is possible because the fourth reinforcement is mandatory when 5 seconds have elapsed since the third reinforcement. The fourth reinforcement is significant because it identifies a possible break in concentration.

The final levitation score is a joint function of time elapsed and number of reinforcements given. It might happen, for instance, that arm movement begins after the first reinforcement but is slow enough to require the second reinforcement. However, levitation is not completed until 8–10 seconds after the secondary reinforcement. The reinforcements and the time are represented on the score sheet as follows:



To reiterate, the levitation score is a process of subtraction: Every subject begins with a score of 4 and loses parts of it as reinforcements are used and time elapses. *The final levitation score is the arithmetic mean of the circled numbers. Each column, though, may only contribute a single number.* The levitation score is part of the profile grade and the induction score.

Item I: Control Differential

While your left arm remains in the upright position, raise your right hand. Now put your right arm down. Are you aware of any

difference in sensation in your right arm going up, compared to your left? For example, does one arm feel lighter or heavier than the other?

The difference in sense of control over one arm as compared to the other emerges as part of the trance experience. The subject was not instructed beforehand to feel this difference. It is *discovered* in this context. These first questions are preparatory; the subject's answers to them are not significant. Only the following question can be scored:

Are you aware of any relative difference in your sense of control in one arm compared to the other as it goes up? (Optional: On a more-or-less basis, do you feel a difference in control?)

If the subject answers "yes," the operator asks: *In which arm do you feel more control?* If the subject says "no," say: *Let's try it again*. Give him or her a second chance by using your thumb and forefinger and to move the subject's hand down onto the arm of the chair just as you did in Item H. Then instruct the subject to: *Let it rise like a balloon or ballet dancer's hand. Just let it go up as it did before.* Now ask: *This time, do you have more or less control in one arm going up compared to the other?*

Item I is a posthypnotic measure of a difference in sense of control that the subject experiences between the "hypnotized" and "nonhypnotized" arms. The subject must feel *relatively* less control in the "hypnotized" arm than in the "nonhypnotized" arm for a positive score (1 or 2). To reiterate, the only element that can be scored is the subject's response to the question concerning the relative difference in control. All other questions are preparatory and cannot be scored. Item I is: *Are you aware of any relative difference in your sense of control in one arm, compared to the other as it goes up?*

- Score 2 if the subject definitely answers "yes" to the scored question and reports less control in the arm that levitated.
- Score 1 if the subject spontaneously qualifies a "yes" (e.g., "a little bit") and reports less control in the arm that levitated. If the subject says "no" or does not understand the question, record his or her first response, ask the question again, and score 1 for a positive response.

If the subject still says "no," give him or her a second chance by using your thumb and forefinger to move the subject's hand down onto the arm of the chair as you did in Item H. Then instruct the subject to: Let it rise like a balloon or ballet dancer's hand. Just let it go up as it did before. Now ask: This time do you have relatively more or less control in one arm going up compared to the other? If the response is positive, draw a square (denoting a second confirmation test) around 1.

• Score 0 if the response to this question is still negative after the subject is given a second chance.

The final score for control differential is part of the profile and induction scores.

Item J: Cut-Off

At this point in the procedure, give the cut-off signal, which is both verbal and physical. Cup the subject's left elbow with your right hand, touching both the inside and outside of the elbow. At the same time, gently grasp the subject's left wrist with your left hand, slowly lower the subject's forearm and hand onto the arm of the chair, and say:

Make a tight fist, real tight, and now open it.

Let go of the subject's elbow. With your left hand, stroke the subject's left forearm by pressing down firmly, starting at the elbow and moving toward the fingertips, and say:

Before, there was a difference between the two forearms. Are you aware of any change in sensation now?

At the word "now," press the subject's left hand as a way of punctuating the end of your stroking his or her left arm. The point of this procedure is to cut off the sense of less control in the subject's left "hypnotized" arm and to exit the postinduction trance program. Remember that, in Item E, you told the subject the cut-off signal—that you would touch the left elbow and the usual sensation would return. Note that touching the elbow is part of several other motions that you carry out. The subject may continue to feel "pins and nee-

dles," tingling in the arm, or relative lightness or heaviness; however, these sensations are irrelevant to a difference in sense of control. A score of 0 on control differential strongly suggests a score of 0 on cut-off. However, the cut-off signal is always administered because of the rare circumstance in which the subject who scored 0 on control differential does not experience cut-off. In this event, control differential is rescored. Of course, when giving the cut-off under these conditions, the operator does not refer to a prior difference in the feeling of control over the two arms. The cut-off may be complete and the sense of control back to normal after this first signal. If so, go ahead to Amnesia (Item K). If not, tell the subject to: *Let your arm go again.* Give the cut-off signal again at this point:

Make a fist a few times. That's right. Open your fist and now put your hand down. Now, make fists with both hands at the same time. Lift your forearms up a few times and tell me when you feel that your control is becoming equal.

Demonstrate the appropriate arm movement as you give these instructions to the subject. This is the postinduction/trance measure of the subject's capacity to end the hypnotic experience on signal.

- Score 2 if the subject indicates that his or her sense of control has returned to normal after you give the cut-off signal.
- Score 1 if the subject's sense of control does not return to normal initially but returns to normal after a second cut-off signal is given.
- Score 0 only if the subject scored 0 for Item I: Control Differential. That is, if the subject had no sense of difference in control, then the cut-off item is superfluous. However, as described in the instructions for administration of cut-off, the signal is always given because of the rare case in which control differential is actually discovered during the cut-off time.

Cut-off is part of the induction score.

Item K: Amnesia

Item K is a measure of amnesia to the cut-off signal. It is included in the HIP because of its clinical use: When someone with low hypno-

tizability experiences amnesia, which frequently occurs, the experience can be used to deal with any skepticism concerning hypnosis. When the amnesia does not occur, the operator has the opportunity, if it seems appropriate, of dispelling myths about hypnosis (e.g., the myth that one who has been hypnotized remembers nothing about the experience).

You see that the relative difference in control that was in your arms is gone. Do you have any idea why?

You may need to specify by saying: *Is there anything I did that might account for it?* If the subject has scored 0 on control differential, then there is no test for amnesia to the cut-off signal. Check "no test" on the score sheet. Scoring is optional; if you choose to score Item K, do so in the following way:

- Score 2 when the subject does not remember being touched on the elbow or being told that he or she would be touched to return to a state of usual awareness.
- Score 1 if the subject remembers one of the operator's two signals to him or her—either the touch or the verbal instructions.
- Score 0 if the subject remembers being told that the operator would *do* something and remembers having his or her elbow touched.

Item L: Float

When your left arm went up before, did you feel a physical sensation that you can describe as lightness, floating, or buoyancy in your left arm or hand? Were you aware of similar sensations in any other parts of your body—such as your head, neck, chest, abdomen, thighs, legs, or all over—or just in your left hand or arm?

In the event that the subject claims that his or her left arm felt heavier, say: *Keep in mind that a boat can be heavy, but because of the buoyancy pressure from below it floats upward*. This instruction helps describe buoyancy and define the sensation.

This item is a postexperiential self-report measure of the amount of buoyancy that the subject remembers experiencing in the trance and is part of the induction score.

- Score 2 if the subject experienced the sensation of lightness, floating, or buoyancy in his or her left arm or hand *and* in at least one other part of his or her body.
- Score 1 if the subject experienced the sensations in only one part of his or her body.
- Score 0 if the subject did not experience the sensation in any part of his or her body.

The float item concludes the HIP.

How to Determine the Summary Scores

Figure 3–1 (on p. 44) is a reproduction of the HIP score sheet on which observations are recorded during the test administration. Sample recordings are presented in this chapter.

Two summary scores, the profile grade and induction score, are derived from the six scored HIP items:

- Item D: Eye-Roll Sign (ER)
- Item G: Dissociation (Di)
- Item H: Signaled Arm Levitation (Lev)
- Item I: Control Differential (CD)
- Item J: Cut-Off (CO)
- Item L: Float (Fl)

The profile grade is the more clinically significant score in that it reveals motivation and the degree of psychological health or mental illness. It compares the level of biological, hypnotic potential (which is apparently tapped by ER) with the level of usable hypnotic capacity (measured by Lev and CD). The subject may meet or exceed the promise of the ER; both of these instances demonstrate psychological health and motivation and give the clinician predictive data about how the subject will respond to subsequent hypnosis and to treatment in general. However, if usable or experienced capacity is significantly lower than biological potential, it also gives an indication of the presence of severe psychopathology that will have an effect on treatment outcome. Different types of depression, side effects of medication such as sedation, and more severe pathology (i.e., schizophrenia) are reflected by a profile grade that shows a break in the subject's ribbon of concentration. (These topics are covered in detail in Part II and in the Appendix.)

The induction score is a more traditional, purely quantitative scale that places the subject on the spectrum of hypnotizability from not hypnotizable to highly hypnotizable. The old induction score is derived from the scores of five hypnotic performance items (Di, Lev, CD, CO, and Fl); the new method of deriving the induction score also takes the scores of Items E and K (instructional arm levitation and amnesia) into account.

The following sections explain the mechanics of deriving the profile grade and induction score and some generally associated hypotheses.

The Profile Grade

The profile grade is a qualitative score (nominal scale). It describes the hypnotic response pattern of the patient and is derived from three central components of the HIP: ER, CD, and Lev. Each profile grade represents a specific relationship between the level of a person's inherent potential for hypnosis (tapped by ER) and the trance level actually experienced (tapped by Lev and CD).

Six profile patterns make up the following three main categories:

- 1. Two patterns (regular intact and special intact) represent *intact* capacity for hypnosis.
- 2. Two patterns (soft and decrement) represent *nonintact* capacities. An intact profile indicates that usable hypnotic capacity or experience of hypnosis is at least as high as biological potential for hypnosis. A nonintact profile indicates that usable capacity is significantly lower than biological potential, and there is a break in the subject's ribbon of concentration.
- 3. Two patterns (regular zero and special zero) represent zero potential for hypnotizability.

An intact capacity for hypnosis indicates that usable hypnotic capacity or experience of hypnosis is at least as high as biological potential for hypnosis. For frequency distributions of the types of

TABLE 4–1

Profile grade	ER	Lev	CD
Intact	+	+	+
Special intact	+	Lev > ER by exactly 2 or more	+
Zero	0	0	0
Special zero = increment	0	+	+
	0	0	+
	0	+	0
Nonintact soft	+	4th reinforcement	+
Nonintact decrement	+	+ or 0	0

Summary of Scoring the Hypnosis Induction Profile

Note. + = positive score; 0 = negative score; CD = control differential; Di = dissociation; ER = eye-roll sign; FI = float; Lev = signaled arm levitation. TRADITIONAL INDUCTION SCORE = Di + 1/2 Lev + CD + FI (0–10 possible). OPTIONAL INDUC-TION SCORE = 1/2 instructional arm levitation + Di + Lev + CD + amnesia + FI (0– 16 possible).

profiles, see the Appendix. Evidence for the validity of the various inferences offered here is also presented in the Appendix. A summary of the scoring criteria for profile types is presented in the following sections and in Table 4–1.

INTACT PROFILE GRADE CRITERIA

- ER and CD are scored greater than 0, and
- On the Lev item, the subject shows complete arm levitation after the third reinforcement or sooner—that is, the fourth reinforcement is not required.

Special Intact Profile All three items (i.e., ER, CD, and Lev) score greater than 0, and the Lev score is two or more units higher than the ER in the special intact profile. This profile pattern shows significantly more experience of hypnosis than the potential for hypnosis measured by the ER and hypothetically indicates strong motivation for hypnotic experience, clinical treatment, or both. See Figure 4–6 as an example.



FIGURE 4–6 Special intact profile configuration.

Regular Intact Profile All profiles that satisfy criteria for the intact profile but that do not fall within the range of the special intact profile are part of the large group of regular intact profile types. For examples of regular intact profiles, see Figures 4–7 to 4–13.



FIGURE 4–7

Regular intact profile configuration.

NONINTACT PROFILE GRADE CRITERIA

- ER is scored greater than 0,
- CD is scored 0, and/or
- The fourth reinforcement was given on the Lev item.



FIGURE 4–8 Regular intact profile configuration.

Soft Profile In the soft profile, ER and CD are scored greater than 0, and the fourth reinforcement was necessary for Lev. In practice, Lev is usually scored 0 in this case, but a score of 0.5 may also represent a soft profile. This situation can occur when the subject's arm begins to levitate in response to the third reinforcement but requires the fourth reinforcement for completion. For an example, see Fig-



FIGURE 4–9 Regular intact profile configuration.

ure 4–14. In general, the soft pattern indicates that the subject shows potential for experiencing trance (positive ER), but Lev is not motivated by the signal. The new instruction in the fourth reinforcement, to "just put it up there, pretend," is necessary for complete levitation. Once the arm is in the instructed position, the subject experiences hypnosis as part of the next procedure, CD.



FIGURE 4–10 Regular intact profile configuration.

Hence, the soft pattern represents a borderline or partial hypnotizability in which the subject is unable to experience all of his or her hypnotic potential.

Decrement Profile ER is greater than 0, and CD is always 0 in the decrement profile. Lev may receive any score. It is hypothesized

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FIGURE 4–11 Regular intact profile configuration.

that the decrement profile shows positive potential for trance but inability to experience it. This decrement represents the inability to express hypnotic potential, a variety of nonhypnotizability that the HIP distinguishes from nonhypnotizability due to lack of potential, as is the case in the straight zero profile (see following section). A decrement profile can also be described as a trance capacity that

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FIGURE 4–12 Regular intact profile configuration.

begins in the zone of intact hypnotizability (as indicated by positive ER); however, concentration is not sustained, and the score collapses out of this zone (0 CD score). The label for the decrement pattern incorporates the ER score and the term *decrement*. Example: ER = 2.5, Lev = 1.5, CD = 0; the profile grade is called a 2.5



FIGURE 4-13

4 Intact profile configuration, possible grade 5.

decrement. In practice, most decrement profiles show a 0 Lev score. For an example, see Figure 4–15.

The profile category is often further described and identified by the ER score. For instance, *3 decrement* refers to a decrement profile pattern in which the ER score was 3. Similarly, subjects can be described as 1.5 intact (regular), 2 special intact, 3.5 soft, etc. (The terms *grade 4* and *grade 3* are occasionally used and refer only to regular intact subjects.)



FIGURE 4–14 Soft profile configuration.

ZERO PROFILE GRADE CRITERION ER equals 0 in the zero profile grade.

Regular Zero Profile In the regular zero profile, ER = 0, Lev = 0, and CD = 0. This is a relatively rare profile pattern that shows no testable potential for hypnosis (zero levitation and control differential). Figure 4–16 is an example of this type of profile pattern.

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FIGURE 4–15 Decrement profile configuration.

Special Zero Profile In the special zero profile, ER = 0, but either Lev or CD, or both, are scored greater than 0 (Figure 4–17). No inherent capacity for hypnosis is indicated, but trance may be partially experienced.



FIGURE 4–16

Regular zero profile configuration.

Induction Score

According to the original method, the induction score for each profile is completed by adding the scores of the following five items: Di, 1/2 Lev, CD, CO, and Fl (see Table 3–2). To obtain a broader range

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FIGURE 4–17 Special zero profile configuration.

of scoring, we expanded the old scale for scoring induction (i.e., a 0to 10-point scale) to a 0- to 16-point scale. To use the new scale, add the scores for Di, Lev (do not halve this score as in the old scale), CD, CO, and Fl, then add the scores for Items E and K according to the following instructions:

- Item E is the instructional arm levitation. Because you may need to help the subject along, the score range of 0–4 on the response is divided in half.
- Item K focuses on the amnesia factor. Score 2 if the subject does not remember both the instruction and being touched twice on the elbow; score 1 if the subject remembers either the instruction or being touched, but not both, or if the subject remembers the instruction and being touched only once; score 0 if the subject remembers both the instruction and being touched twice.
- Old scale: low = 0–3.5; mid-range = 3.5–7.5; high = 7.5–10
- New scale: low = 0–6; mid-range = 6–12; high = 12–16

With the new 16-point scale, *the entire testing procedure is exactly the same*, but the additional scoring points provide a broader range with which to evaluate the individual flow of hypnotic capacity and responsivity.

Relationship Between the Two Summary Scores

Certain relationships between the induction score and the profile grade are necessary simply as a result of the way the HIP is constructed. Because the decrement profile is defined as a score on CD (and thus, as 0 on CO), the induction score can be no higher than 6.0. Similarly, because the Lev score on the soft profile is usually 0, the induction score in practice falls at 8.0 or below.

Clinical Uses of the Hypnosis Induction Profile

A Method of Self-Hypnosis

After you have completed the HIP, you are in a position to teach the subject how he or she can use his or her hypnotic capacity to shift into a state of attentive concentration in a disciplined way.

This is how it is done. I am going to count to three. Follow this sequence again. One, look up toward your eyebrows, all the

way up; two, close your eyelids, take a deep breath; three, exhale, let your eyes relax, and let your body float.

As you feel yourself floating, you concentrate on the sensation of floating and at the same time you permit one hand or the other to feel like a buoyant balloon and allow it to float upward. As it does, your elbow bends, and your forearm floats into an upright position. Sometimes you may get a feeling of magnetic pull on the back of your hand as it goes up. When your hand reaches this upright position, it becomes a signal for you to enter a state of meditation. As you concentrate, you may make it more vivid by imagining you are an astronaut in space or a ballet dancer.

In this atmosphere of floating, you focus on this:

At this point in the procedure, you insert whatever strategy is relevant for the patient's goal, in a manner consistent with the trance level that the patient is able to experience. It is best to formulate the approach in a self-renewing manner that the subject is able to weave into his or her everyday lifestyle. The patient must sense that he or she can achieve mastery over the problem he or she is struggling with by "reprogramming" him- or herself—often identified as an "exercise" using a self-affirming, uncomplicated reformulation of the problem.

Now, I propose that in the beginning you do these exercises as often as 10 different times a day, preferably every 1 to 2 hours. At first, the exercise takes about a minute, but as you become more expert at it, you can do it in much less time. You sit or lie down and, to yourself, you count to three. At one, you do one thing; at two, you do two things; at three, you do three things. At one, look up toward your eyebrows; at two, close your eyelids and take a deep breath; and at three, exhale, let your eyes relax, and let your body float. As you feel yourself floating, you permit one hand or the other to feel like a buoyant balloon and let it float upward as your hand is now. When it reaches this upright position, it becomes your signal to enter a state of meditation in which you concentrate on these critical points.

Here you restate in an abbreviated but even more direct way, and in as simple a formula as possible, what the patient is to review for him- or herself each time he or she does the exercise. Reflect on the implications of this and what it means to you in a private sense. Then bring yourself out of this state of concentration called self-hypnosis by counting backward this way.

Three, get ready. Two, with your eyelids closed, roll up your eyes (and do it now). And, one, let your eyelids open slowly. Then, when your eyes are back in focus, slowly make a fist with the hand that is up and, as you open your fist slowly, your usual sensation and control return. Let your hand float downward. That is the end of the exercise. But you will retain a general feeling of floating.

If necessary, demonstrate the entire procedure by doing it yourself. Repeat the sequence of entering the trance state so that the patient can watch. Then, while you supervise with direction, the patient repeats it again.

By doing the exercise every 1 to 2 hours, you can float into this state of buoyant repose. You have given yourself this island of time, 20 seconds every 1 to 2 hours, in which to use this extrareceptivity to reimprint these critical points on yourself. Reflect on them, then float back to your usual state of awareness, and get on with what you ordinarily do.

Camouflage for Self-Hypnosis

People do not always have the privacy to perform the self-hypnosis exercise. What follows is a modification of the exercise so that it can be done in public every 1–2 hours.

Now, suppose 1 or 2 hours pass and you want to do the exercise. You do not have privacy and do not want to make a spectacle of yourself. Here is the way you do it. There are two changes. First, you close your eyes and then roll your eyes up so that the eye-roll is private. People seeing your eyes roll may become frightened. Second, instead of your hand coming up like this...

Demonstrate arm levitation as it was done in the hypnosis session.

let it come up and touch your forehead. To an outsider, the exercise looks like you are thinking about something....

Demonstrate a camouflaged arm levitation.

In 20 seconds, you can shift gears, establish this heightened sense of concentration, reaffirm your approaches to the problem, and shift back out again.

You may be sitting at a desk or a table, or you may be in a conference, in which case you lean over on your elbow like this, with your hand already on your forehead, you close your eyes, roll them up, and shift into a trance state.

Demonstrate.

Let's try it again....

Repeat the camouflage technique. This time, instead of demonstrating, have the patient try it.

By doing the basic or camouflage exercise every 1 to 2 hours during the day, you establish a private signal system between you and your body so that you are ever alert to this commitment to your body.

Elaborate on this instruction with reference to the treatment strategy you have used.

Further Testing to Identify Grade 5

The highest score on the regular HIP is a grade 4. All scores of 4 are potentially scores of 5 (H. Spiegel 1974a). The three criteria used to test further trance capacity are

1. Ability to sustain posthypnotic sensory and motor alterations. For testing, the subject is placed back into trance by using the same three-step induction outlined in the first part of the HIP procedure (i.e., look up while closing your eyelids; take a deep breath, exhale, let your eyes relax; let your body float, and let one hand float up like a balloon). The subject is then administered one of the following instructions when in trance. The instruction is given so that the subject understands that he or she is to comply with the

sensory or motor alteration after leaving the formal trance state. A cut-off signal is included to terminate each instruction. Examples that satisfy this criterion are positive or negative visual or auditory hallucinations and flaccid or rigid limb paralysis in response to a posthypnotic signal.

- Positive hallucinations. For example, instruct the subject to "See a bird when the door closes" or "Hear music when you move your legs."
- Negative hallucinations. For example, "Do not hear anybody's voice but mine [the hypnotist's]."
- Motor paralysis. For example, tell the subject, "When out of trance, your left arm will be limp. When I touch your left shoulder, your arm strength will return," or "Your clasped fingers are stuck together, and you are unable to open hands until I stroke your wrists."

In all of these tests, the sensorimotor distortions terminate with the cutoff signal.

- 2. Total spontaneous amnesia (i.e., experiencing amnesia without being signaled to do so) to the entire hypnotic experience.
- 3. Ability to regress to earlier age levels and experience them *in the present tense* with appropriate verbal, motor, and affective behavior for those chronological ages. For example, "This is no longer the present time; you are going back into the years; you are getting younger; 24 years old, 17 years old, 11 years old, 6 years old; today you are 4 years old, this is your fourth birthday. When I touch the side of your eyes, you'll be able to open your eyes and talk with me. Later, when I touch your forehead, your eyes will again close. Ready!"

"Hello, what's your name?"

"Anything special about today?," etc.

Responses appropriate for the given age and in the present tense represent the grade 5 level of HIP scoring. Responses that are somewhat appropriate and somewhat regressive with some apparent historical perspective score at the 4 or 5 level. If there is no regression response at all, the score remains at the 4 level.

Persons with grade 5 syndrome (approximately 5% of the population) demonstrate positive responses to all three tests. If the subject responds positively on some but not all the above criteria, he or she is given a score of 4-5. If the subject does not score positively on any of these tests, the score remains 4. Persons who are assigned grades 4, 4–5, and 5 are treated with essentially the same clinical strategies.

Replication Data

Because most of the early data with the HIP were gathered from 2,000 consecutive patients by a single examiner (H.S.) (H. Spiegel et al. 1975), DeBetz and Stern (1979) reported on a separate series of 735 consecutive patients, all of whom were tested by DeBetz. Factor analysis and score distribution were remarkably similar in the two samples. Not only were the overall score distributions replicated, but age effects on the scores in the original data were nearly duplicated. The findings suggest that it is the patients' responses to the HIP itself, rather than to the idiosyncrasies of the examiner, that is the determining factor in the scores. The results confirm the stability of the HIP scores and support the factor structure and age effects reported by the earlier study.

PART II THE HYPNOTIC INDUCTION PROFILE AS A DIAGNOSTIC PROBE



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Spectrum of Hypnotizability and Personality Style

CHAPTER 5

The Person With the Problem: Apollonians, Odysseans, and Dionysians

The brain, specifically its synapses, makes us who we are.

Joseph LeDoux Synaptic Self: How Our Brains Become Who We Are

Three critical questions should be answered to formulate the best treatment approach:

- 1. What is the problem?
- 2. Who is the person with the problem?
- 3. What is the best strategy to use to help that kind of person deal with that type of problem?

The purpose of this chapter is to provide our approach to the assessment of questions two and three. Our clinical experience suggests that people without severe psychopathology can be roughly grouped, or "clustered," into one of three general personality styles. The cluster hypothesis is a generalization derived from our observations of the clinical pattern of patients who were given the Hypnotic Induction Profile (HIP) and who had intact scores, excluding softs and decrements (see Chapter 4, Administration and Scoring). The intact profile indicates a potential capacity to experience what is called *flow* (Csikszentmihalvi 1991). By flow, Csikszentmihalvi means a harmonious integration of all relevant feelings, knowledge, and motivation that fulfills a specific goal with a seemingly timeless effortlessness, similar to the artist's "aesthetic rapture" or the athlete's "zone." On the other hand, the nonintact profile (i.e., those with soft profiles and those with decrement profiles) indicates an erratic or total inability to experience such harmonious integrated flow. Variability among people in the normal range from low to high hypnotizability has been, in our clinical experience, associated with three personality types or clusters of attributes. These clinical observations have also been compared with other measures, including independent diagnoses and psychological testing. The three major personality types that emerge from the data are Dionysian, Apollonian, and Odyssean. Dionysians are intuitive, feeling, and trusting of others; they tend to be highly hypnotizable. Apollonians are logical, organized, and prefer to lead rather than follow. They tend to be at the low range of hypnotizability. Odysseans fluctuate between action and despair but are more balanced in the dialectic between feeling and thinking. They tend to be moderately hypnotizable. First, we describe these types briefly and then discuss them in more detail.

Dionysians

The chariot of Dionysos is bedecked with flowers and garlands, panthers and tigers stride beneath his yoke. If one were to convert Beethoven's "Paean to Joy" into a painting, and refuse to curb the imagination when that multitude prostrates itself reverently in the dust, one might form some apprehension of Dionysiac ritual. Now the slaver emerges as a free man: all the rigid, hostile walls which either necessity or despotism has erected between men are shattered. (Nietzsche 1956, p. 23)

Our initial observations about the Dionysian personality style grew out of some intriguing psychological problems encountered by patients at the upper range of hypnotizability on the HIP (H. Spiegel 1974a). These individuals had a high eve-roll and high response on the behavioral aspects of the test. We called them grade 5 because, in addition to their high eve-rolls (scored 0-4), the individuals performed all of the usual hypnotic experience on the HIP and showed the following additional hypnotic features: 1) age regression in the present tense, 2) posthypnotic amnesia, and 3) persistent psychosomatic alterations. Our observations of these so-called grade 5 patients resulted in the impression that they had certain clusters of characteristics that were more or less consistent with their high hypnotizability and with their ability to spontaneously slip into trance states: Their daily functioning and interpersonal relationships seemed hypnotic-like. Grade 5 patients adopted a naive posture of trust in relation to many, if not all, of the people in their environment, were prone to suspend critical judgment, had a tendency to affiliate easily with new events (one patient became nauseated every time her friend's sick dog was nauseated), and demonstrated a telescoping of their sense of time so that their focus was almost exclusively on the present rather than on the past or the future. They further demonstrated a tendency to use extreme trance logic (Orne 1959) in that they were relatively comfortable with logical incongruity, had excellent memories, and had an unusually good capacity for intense and focused concentration.

In addition, patients with high hypnotizability and considerable psychological dysfunction showed a fixed personality core of beliefs that was relatively nonnegotiable, although these individuals were in other ways very compliant. Especially troubling was their role confusion and fixed sense of inferiority: These two characteristics often served as a rationalization for a naive posture of trust and uncritical acceptance of cues from others. These patients tended to say to themselves: "Who am I to know anything about this, compared to the person who is directing me?" As one might expect, they were very prone to spontaneous trance experiences and uncritical acceptance of casual comments as posthypnotic signals. One such patient described herself as a "disciple in search of a teacher."

Apollonians

It then occurred to us to look for what we call *Apollonian characteristics* in the low and nonhypnotizable patients within the intact range of the HIP. We expected to find these people more cognitive, organized, critical, aware of the periphery in their style of concentration, and therefore less trusting of others. We found clinical and research data to support this hypothesis.

The stage for contrasts was set. As an alternative to Dionysus, Nietzsche describes Apollo:

Apollo is at once the god of plastic powers and the soothsaying god. He who is etymologically the "lucent" one, the god of light, reigns also over the fair illusion of our inner world of fantasy. The perfection of these conditions in contrast to our imperfectly understood waking reality, as well as our profound awareness of nature's healing powers during the interval of sleep and dream furnishes a symbolic analogue to the soothsaying faculties and quite generally to the arts, which make life possible and worth living. But the image of Apollo must incorporate that thin line which the dream image may not cross under penalty of becoming pathological, of imposing itself on us as crass reality; a discrete limitation, a freedom from all extravagant urges, the sapient tranquility of the plastic god. (Nietzsche 1956, p. 21)

The ongoing theme of Apollonian individuals is control: reason over passion. As we scrutinized those with low scores on the HIP, we found that they put tremendous emphasis on reason and understanding and were very much prone to planning for the future and to using their critical faculties to the utmost. One patient who proved to be an intact-1 spent most of the first session debating the issue of free will—whether all hypnosis was self-hypnosis or whether the hypnotist would be implanting something in her mind by hypnotizing her. It was only at a second session that we could set aside these arguments and proceed with the profile.

Odysseans

For Nietzsche, the ground between Apollonian reason and Dionysian ecstasy was filled by the Greek tragedians. We describe those people with mid-range scores on the HIP with reference to their extreme characteristics. We named them after Homer's tragic hero, Odysseus, a man whose name literally means *trouble*, or *to give pain and* receive pain.*

Walking beneath high Ionic peristyles, looking toward a horizon defined by pure and noble lines, seeing on either hand the glorified reflection of his shape in gleaming marble and all about him men moving solemnly or delicately, with harmonious sounds and rhythmic gestures: would he not then, over-whelmed by this steady stream of beauty, be forced to raise his hands to Apollo and call out: "Blessed Greeks! how great must be your Dionysos, if the Delic god thinks such enchantments necessary to cure you of your dithyrambic madness!" To one so moved, an ancient Athenian with the august countenance of Aechylus might reply: "But you should add, extraordinary stranger, what suffering must this race have endured in order to achieve such beauty! Now come with me to the tragedy and let us sacrifice in the temple of both gods." (Nietzsche 1956, p. 146)

This quotation reminds us that many Greek temples had altars both to Apollo and to Dionysus and that the greatness of Greek tragedy was its embodiment of the never-ending tension between the desire and capacity to experience extremes of joy and sorrow, and the hope that reason would provide a clarity and order to human experience to transcend mere sensation. To Nietzsche, tragedy represented a high artistic expression of the fact that the tension between reason and passion is never eliminated in human experience; it is rather to be savored and suffered. Hence, the Greek tragic vision that humans can never fully succeed in the satisfaction of their desires and yet they are never far from the will to achieve what is beyond themselves.

The Odyssean group is the vast midrange (grades in the 2–3 range on the HIP) composed of mixtures of the opposing Dionysian and Apollonian qualities. We call the group *Odysseans*, named for a wanderer of fluctuating moods, capable of heroic bravery and profound despair—not a mythical deity, like Apollo and Dionysus, but a mythical human. For these individuals, the tension between reason and feeling is in some ways more trouble than for Apollonians and

[°]We are indebted to Professor Jacob Stern of the Department of Classics at City College, City University of New York, for reviewing our data and suggesting the term *Odyssean*.

Dionysians. Odysseans are less settled and are more compelled to find a formula for integrating their conflicting priorities, a formula that Nietzsche described as the stuff of which tragedies are made. And yet these individuals are often productive, normal people who have the kinds of life crises that we have learned to identify as part of normal growth and development.

Certain clusters of characteristics were found to be generally present among low-intact patients. They were steady, unemotional, organized individuals. They were not devoid of passion but were far more prone to value reason than passion. However, when passion was expressed by manipulating and controlling, some Odyssean features appeared to embellish the Apollonian format. We label this personality type *Apollonian-Odyssean* (AO).

In the structuralist sense, all phenomena are best understood not merely as things in themselves but rather in the context of alternative possibilities. Thus, even those people who make up the majority of the psychiatrically healthy population are best understood in terms of the possible extreme personality characteristics of which they represent a kind of integration. We have broadly characterized Odyssean style in terms of action and despair. Odyssean individuals fluctuate between periods of absorption and involvement in life and periods of a more critical and at times despairing review of—or response to this style of living. Their clusters of characteristics are explained in the remainder of the chapter with illustrations from our own clinical experience and from literary sources.

Other Illustrations of the Apollonian-Odyssean-Dionysian Spectrum

The application of Western mythology to clinical psychiatry may seem somewhat strange, but the use of such myths is not unknown to the behavioral sciences. Ruth Benedict, in her classic book *Patterns* of *Culture* (1934), applied the Apollonian-Dionysian model to her analysis of the culture contrasts between the Pueblo and Plains Indians. She found that the Pueblo Zuni tribes, with their carefully constructed and highly organized pueblos, represented a kind of Apollonian model of Native American culture in which reason and ceremony were highly valued. The Navajos, who lived on the Plains, had a much less structured society with more emphasis on feeling and activity and were better characterized as Dionysians. This marked cultural contrast is conveyed by the Pueblo Zuni jewelry with its careful inlay and geometric shapes, in contrast to the more dramatic and heavy Navaho jewelry with its flowing lines of silver and respect for the natural outlines of the stones. Thus, encouraged by the explanatory fertility of Benedict's model, we have attempted to expand and apply it to clinical psychiatry.

A serious, yet amusing, use of these mythological types is found in a letter to the editor of *Science* by the Nobel Prize winner Szent-Györgyi (1972). He wrote:

Wilhelm Ostwald^{*} divided scientists into the classical and the romantic. One could call them also *systematic* and *intuitive*. John R. Platt[†] calls them *Apollonian* and *Dionysian*. These classifications reflect extremes of two different attitudes of the mind that can be found equally in art, painting, sculpture, music, or dance. One could probably discover them in other alleys of life. In science, the Apollonian tends to develop established lines to perfection, while the Dionysian rather relies on intuition and is more likely to open new, unexpected alleys for research. Nobody knows what "intuition" really is. My guess is that it is a sort of subconscious reasoning, only the end result of which becomes conscious.

These are not merely academic problems. They have most important corollaries and consequences. The future of mankind depends on the progress of science, and the progress of science depends on the support it can find. Support mostly takes the form of grants, and the present methods of distributing grants unduly favor the Apollonian. Applying for a grant begins with writing a project. The Apollonian clearly sees the future lines of his research and has no difficulty writing a clear project. Not so the Dionysian, who knows only the direction in which he wants to go out into the unknown; he has no idea what he is going to find there and how he is going to find it. Defining the unknown or writing down the subconscious is a

^{*}W. Ostwald, *Grosse Manner*, Akademische Verlagsgesellschaft GMBH, Leipzig, 1909.

[†]J. R. Platt, personal communication.

contradiction *in absurdum*. In his work, the Dionysian relies, to a great extent, on accidental observation. His observations are not completely "accidental" because they involve not merely seeing things but also grasping their possible meaning. A great deal of conscious or subconscious thinking must precede a Dionysian's observations. There is an old saying that a discovery is an accident finding a prepared mind. The Dionysian is often not only unable to tell what he is going to find, he may even be at a loss to tell how he made his discovery.

Being myself Dionysian, writing projects was always an agony for me, as I described not long ago in Perspectives of Biology and Medicine.* I always tried to live up to Leo Szilard's commandment. "don't lie if vou don't have to."+ I had to. I filled up pages with words and plans I knew I would not follow. When I go home from my laboratory in the late afternoon, I often do not know what I am going to do the next day. I expect to think that up during the night. How could I tell, then, what I would do a year hence? It is only lately that I can see somewhat ahead (which may be a sign of senescence) and write a realistic proposal, but the queer fact is that, while earlier all my fake projects were always accepted, since I can write down honestly what I think I will do my applications have been invariably rejected. This seems quite logical to me; sitting in an easy chair I can cook up any time a project which must seem quite attractive, clear, and logical. But if I go out into nature, into the unknown, to the fringes of knowledge, everything seems mixed up and contradictory, illogical, and incoherent. This is what research does; it smoothes out contradiction and makes things simple, logical, and coherent. So when I bring reality into my projects, they become hazy and are rejected. The reviewer, feeling responsible for "the taxpayer's money," justly hesitates to give money for research, the lines of which are not clear to the applicant himself.

A discovery must be, by definition, at variance with existing knowledge. During my lifetime, I made two. Both were rejected offhand by the popes of the field. Had I predicted these discov-

[†]Szilard, personal communication.

^{*}Szent-Györgyi. Perspect Biol Med 15:1, 1971.

eries in my application, and had these authorities been my judges, it is evident what their decisions would have been.

These difficulties could perhaps be solved to some extent, by taking into account the applicant's earlier work. Or, if the applicant is young and has had no chance to prove himself, the vouching of an elder researcher acquainted with the applicant's ability may be considered. The problem is a most important one, especially now, as science grapples with one of nature's mysteries, cancer which may demand entirely new approaches.*

> Albert Szent-Györgyi Institute for Muscle Research Marine Biological Laboratory Woods Hole, Massachusetts

This letter emphasizes a theme that is central to our approach: In many people, the distinctions we are describing are differences in style and are not indicative of psychopathology. The Dionysian has an intuitive sense, as Szent-Györgyi describes it, which can be very useful but lacks the structure and planning that characterizes the Apollonian.

Psychiatrists and many laypeople tend to use short-cut descriptions of a person's style of living or thinking by resorting to pathological-like labels, without necessarily intending to imply a predominance of psychopathology—for example, *hysterical type*, *obsessive type*, *schizoidlike*, *depressive type*, *maniclike*, *obsessivecompulsive*, and *psychopathic*. Usually, it is necessary to smile, joke, or make quick disclaimers along with the term so as not to be misunderstood. We agree that there are clear personality traits that are more or less distinct, but these traits can be clearly alluded to by descriptive terms that do not imply pathology or behavior deviance. People differ in many ways that are healthy. So we use neutral, nonclinical, but perhaps somewhat dramatically exaggerated labels to describe the main character types.

As has been done before, we go back to the Greeks and adopt three clear but overlapping labels: Apollonian, Odyssean, and Dionysian (A, O, and D). With these categories, personality and character

^{*}Reproduced with author's permission. From Science 176:196, 1972.

differences can be discussed without implying value judgments about health or illness.

Although these three styles were not labeled as such, Paul Johnson's brilliant and critical portrait of 20 outstanding thinkers of the last two centuries in his book *Intellectuals* (1988) gave enough data to allow a classification of each one. Eighteen of these 20 scored A or AO, 2 scored at the O level, and not a single one approached the D level. These findings, in a grouping of intellectuals, are consistent with the cognitive features of the Apollonian.

For example, Henrik Ibsen wrote to a friend, "I cannot make close contact with people who demand that one should give oneself freely and unreservedly. I prefer to shut up my true self within me." Ibsen would receive the A label from this description. From the following illustration of Kenneth Tynan—"He seemed to fill the lodge with his possessions and servitors whom he ordered about with a calm and imperious authority.... It was always Tynan's habit to order people around; he had the touch of the master"—he would receive the AO label (Johnson 1988, p. 97).

Compulsive Triad

We have devised a system to visually represent the significance of the three personality types and their different hypnotic capacities. The system is designed so that it focuses not on hypnotizability per se, but on using a cluster of behavioral transformations that we have named the *compulsive triad* (Figure 5–1). The triad is composed of three consistent features: amnesia to the context of a signal, compulsive compliance with the signal, and rationalization of the compliance. Variations in these features characterize the differences among Dionysians, Apollonians, and Odysseans. For example, a description of a type of compulsive triad observed in a hypnotic subject follows:

During the administration of the HIP, a patient who proved to be moderately hypnotizable was asked to explain the sudden change in sensation in his left arm after the cut-off signal (touching his elbow) had been given. He looked at his arm, noted that it was indeed no longer upright, and then com-



THE COMPULSIVE TRIAD IN HYPNOSIS



mented, "It feels different now because the circulation is better—you get more blood circulating when your hand is down." He denied any memory of having his elbow touched, although he conceded that it might have happened when his arm was stroked. He also denied remembering any instructions regarding a change in sensation in his arm.

In this case, the patient demonstrated clearly all three aspects of the compulsive triad: He developed an amnesia for the cut-off signal; felt a compulsion to comply with the signal, which he did by letting his arm float back down to the chair; and invented a rationalization for his behavior that did not include any memory of the original signal. A more highly hypnotizable subject emphasizes compliance with the signal without an explanation. He or she is amnesic for the signal and singularly uncurious about how the event occurred. On the other hand, a subject with low hypnotizability is more likely to say, "I think I remember your saying that when you touched my elbow something would happen—did you touch it?" He or she complies reluctantly with the signal and then is sure to provide some rationalization, such as, "I prefer to have my hand down now anyway."

The compulsive triad, which appears so clearly and in such a short period in a hypnotizable individual, can be seen as one type of a far more general phenomenon. We often find ourselves compelled to act for reasons that, in varying degrees, we have forgotten. When pressed for an explanation, we invent what amounts to rationalizations for our behavior. This is not to say that we are never aware of the reasons for our conduct, but generally the determining factors are so complex that our "reasons" are almost certainly to some degree rationalizations.

A general example of the compulsive triad operating in a person not hypnotized may be in the obsessional rituals of a person with obsessive-compulsive disorder. He or she feels a compulsion to act in compliance with his or her obsessional ideas. The subject has at least some degree of amnesia for the origins of his or her obsessions and rituals, and frequently has a complex structure of rationalizations for the behavior. The behavior is compulsive and extensively rationalized.

The sizes of the compulsive triad triangles in Figure 5-1 and in succeeding figures in this chapter represent variations in the rigidity and nature of the compulsive triad phenomena elicited so directly during hypnosis. The smaller triangle, labeled *direct response*, indicates the relatively less compulsive nature of a behavioral response to a direct request than the response to a posthypnotic suggestion or the response during a compulsive ritual. The input signal is mostly remembered rather than forgotten, the rationalization for the behavior is therefore quite close to the actual signal given, and compliance is relatively voluntary-or noncompulsive. It is closer to being a rational choice; the individual hears the request, remembers it, and makes a more or less conscious decision about whether to comply. Hence, there is little distance between the signal, the reason, and the compliance, and the triangle is small. A larger triangle suggests that the input signal is less remembered, the rationalization is further from the original impetus for the behavior, and compliance is relatively compulsive in nature.

The point is that a common pattern of behavior can be discerned in widely different situations, types of people, and levels of hypnotizability among people. The persistence of this pattern in diverse situations suggests that it may be the key to a more general transformation in which we are constantly negotiating the relationship between thought and behavior and trying to reconcile our constellation of myths and beliefs with our process of interaction with the world (H. Spiegel and Shainess 1963). We are routinely confronted with the problem of trying to understand our behavior and with the fact that the reasons we provide ourselves can never fully take into account all of the social, interpersonal, and unconscious forces that influence our behavior. We do not defend the deterministic thesis that all behavior is merely the result of external and internal forces, similar to a vector diagram in physics; nevertheless, we do exist in a complex field of forces that influences our behavior.

We also continually face the problem of assessing our behavior in an effort to see whether it lives up to our cognitive concepts of ourselves. Every action is an expression of our conscious and unconscious belief system as it is integrated with interpersonal and social forces. Our behavior can be viewed as a statement that translates a complex set of beliefs into action. It is never a simple statement, and we contend that it is usually ambiguous because there is likely to be some rationalization and amnesia about the forces that motivated the behavior. At the same time, a person is likely to think his or her behavior is a personal expression—that is, representative of his or her beliefs. Furthermore, different aspects of the gap between motivation, rationalization, and action characterize different types of people. The people we call Apollonians emphasize rationalization, whereas Dionysians engage repetitively in compulsive compliance.

As stated, the cluster hypothesis is a series of generalizations regarding characterological styles and traits that seem to be related to trance capacity as measured by the HIP. These traits are an amalgam of clinical experience, reviews of psychological testing, answers to questionnaires, the literature on traits associated with hypnotizability, the neurophysiological literature, and studies of hypnotizability and psychopathology, much of which is reviewed later in this book. Our generalizations are operational rather than absolute. We consider them correct insofar as they can be empirically validated but, more important, they prove clinically useful in constructing an appropriate approach to the patient and the patient's problem. They are not so much categories as guidelines, ways of quickly tuning in to the interactional style of the patient so that brief and effective intervention is facilitated and decision making in regard to the appropriate longterm intervention, if necessary, is more rational and effective.

Dionysian Versus Apollonian

It is apparent that people differ in somewhat predictable and classifiable ways in their systems of beliefs and premises and in their styles of behavior. To begin, we compare and contrast the styles of people in the Dionysian and Apollonian groups—those who are extremely hypnotizable and those who are barely hypnotizable (Figure 5–2) using the compulsive triad model of compulsive compliance, rationalization, and amnesia.

For Dionysians, rationalization is used in the service of compliance; for Apollonians, compliance is used in the service of rationalization. As a crude generalization, more highly hypnotizable people value feeling and action over reason and are relatively unconcerned about the explanation of their motives: A Dionysian may present an explanation in a disinterested way and be prone to accept paradoxes and conflicts in describing his or her reasons, all of which would stymie an Apollonian (Orne 1959). The capacity of Dionysians to tolerate logical incongruities has been previously described in the clinical setting (H. Spiegel 1974a). As noted earlier, tolerance for such logical incongruities is not solely a characteristic of the trance state but is a more general aspect of human existence.

Cognitive and Affective Dissonance

Cognitive dissonance was discussed in some detail by Festinger (1957) in his classic work on the subject. Festinger noted that the degree of logical conflict between two beliefs or between a personal belief and an observation in the world leads to behavior that is designed to reduce the dissonance. Often, this behavior does not challenge an aberrant belief; rather, it seeks to distort perception of the reality. Behavior designed to reduce dissonance occurs by gathering together a group of supporters who share a view of the world that denies some obvious reality. Festinger's important work seems to focus largely on cognitive dissonances—that is, logical contradictions involving conflicting beliefs, or beliefs and perceptions that contradict them. The behavior observed was often of an organizational nature. For example, those individuals who were disappointed in their belief that a flying saucer would rescue them from a disintegrating



earth set about organizing others to confirm the validity of a modified prophesy of doom. Before this flat contradiction of their belief, they had been rather secretive. Afterward, rather than abandoning their obviously faulty theory, they actively set about convincing others that they had saved the earth from catastrophe by believing in its impending demise.

Although we know of no studies relating hypnotizability to cognitive dissonance phenomena, we speculate that the type of cognitive dissonance described by Festinger is especially characteristic of the Apollonians, for whom logical paradoxes are of critical importance. The problem for the Dionysian is what we call *affective dissonance*; the Dionysian is troubled more by conflicting emotional ties or instructions from others and less by logical or cognitive paradoxes. For a Dionysian, conflicting loyalties or instructions from valued people in his or her life create a crisis resolved either by seeking support from someone who can transcend the conflict or by shifting allegiances back and forth.

Cognitive dissonance is less problematic for the Dionysian, as has been demonstrated in experiments with highly hypnotizable individuals who can, for example, hallucinate the absence of an individual who is seated in the room. These perceptual distortions make it relatively easy to eliminate cognitive paradoxes, although the Dionysian is prone to suffer with affective dissonances. Conflicting loyalties rather than conflicting ideas create the most pressure for change in a Dionysian. Our clinical experience indicates that the obverse is true for the Apollonian. Manipulating loyalties, as Festinger describes it, is important to the Apollonian only in the service of reducing cognitive dissonance. For the Dionysian, cognitions and perceptions are altered in the service of reducing affective dissonance, which often involves conflicting loyalties.

A historical example of affective dissonance and its consequences in a person whom we presume to have been a Dionysian follows. At first glance, one may think that all Dionysians are so compliant that they inevitably become followers rather than leaders. This is not necessarily so; much depends on the social matrix and support systems available and used by the person.

Mary Baker Eddy, the founder of Christian Science, was a woman whose influence endures in our culture. Without undertaking a psychohistory project, we refer only to a few relevant reported events in Wilbur's (1907) biography of Mrs. Eddy, who personally approved the manuscript. Mrs. Eddy was "delicate in health from birth." Later, her condition was called *spinal weakness*. It was necessary for her to be carried from room to room by her father during her childhood and adolescence. When she eventually married and gave birth to a son, "she was far too ill to nurse her child," who was raised by a wet-nurse.

Ultimately, she heard of a hypnotist, a student of Mesmer's, one Phineas T. Quimby to whom she went for help. Under trance "...the relief was no doubt tremendous. Her gratitude was unbounded. She felt free from the excruciating pain of years. Quimby himself was amazed at her sudden healing." A rather intense relationship developed between Mrs. Eddy and Quimby, and they kept in contact over a period of years. One day Mrs. Eddy received a letter informing her that Quimby had died suddenly. The next day she slipped on the ice, re-injured her back, and went into a dark period of despair. She emerged from it having concluded that it was not animal magnetism that had cured her but the word of God. In this way, her cure was resurrected, and she strengthened her relationship with yet another father figure—this time the supreme one. (p. 87)

This dramatic description of her sudden hypnotic responsiveness, sudden cure, and the complete fulfillment of her expectations seems so authentic and typical of the Dionysian seeking of relief from stress that we infer she was a grade 5. In retrospect, it appears that during her earlier years she unconsciously used pain and weakness as a means of eliciting attention and concern from her family. The "spinal weakness" was a somatic metaphor rather than a physical disability. She then used her "cure" to elicit even more attention, now directed toward her strength and mastery rather than toward her weakness. Thus, in a few years she emerged as a recognized healer and leader, gathering converts from the ranks of the healed, their relatives, and friends. This is an example of how hypnosis is at the root of many important movements but often is brushed aside as the movement develops. At the least, we owe to "animal magnetism" the existence of The Christian Science Monitor, one of the better newspapers in the United States.

Interestingly, Mrs. Eddy's conflict was one of loyalties rather than ideas. The miraculous fact of her cure was less troubling than the conflict over to whom she owed loyalty for the result. She initially felt quite fond of Quimby, but then after learning of his sudden

death, she emerged from her grief having decided that her healing was due to the word of God, and shifted her allegiance. In Mrs. Eddy's words:

It has always been my misfortune to think people better and bigger than they really are. My mistake is, to endow another person with my ideal, and then make him think it is his own....(Wilbur 1907, p. 94)

Her growing recognition of her tendency to idealize others helped her to confirm her new loyalty. She could deal with adversity and criticism by offering to her critics the opportunity for a new relationship with God. To this day, attendance at a Christian Science service is an intense and emotionally involving experience. It is also one still hostile to hypnosis. One of the weekly lessons is entitled "Ancient and modern necromancy, alias hypnotism and Mesmerism, denounced."

In summary, the highly hypnotizable person tends to readily comply with a signal, forget it, and rationalize casually about the meaning of his or her behavior. The individual conveys his or her relative disinterest in the predominance of reason and a willingness to affiliate with new modes of action. By contrast, the person who is hypnotizable at a low level complies with a signal in a more rigid and methodical way and is more interested in providing a consistent rational explanation for his or her behavior. The individual demonstrates belief in reason via behavior and the explanation for it, although he or she may be more or less amnesic for the hypnotically induced causes of an action.

Major Groupings of the Cluster Traits

We have organized the clusters of traits that characterize the Dionysians, Apollonians, and Odysseans into four major groupings (Figure 5-3): spatial awareness, time perception, myth-belief constellation (content), and processing. These traits are related to the trance experience itself, but the trance state need not be formally induced for them to be manifested. Rather, we have gathered information by

	Hypnotic GRADE: Induction Profile	0) 1	2	2 3	} 2	4 5
	CHARACTER TYPES		APOLLONIAN		ODYSSEAN		DIONYSIAN
	A) Space Awareness (Absorption)		Focal		FOCAL-PERIPHERAL		FOCAL Peripheral
	B) Time Perception		PAST-FUTURE		PAST-PRESENT-FUTURE		PRESENT
	C) Myth–Belief Constellation (Premises)		COGNITIVE Affective		AFFECTIVE-COGNITIVE		AFFECTIVE Cognitive
STRUCTURES	1) Locus of Ir personal C	nter- ontrol	INTERNAL		INTERNAL-	EXTERNAL	EXTERNAL
	2) Trust Proneness 3) Critical Appraisal		LOW		VARIED		HIGH
			IMMEDIATE		VARIED		SUSPENDED
	4) Learning S	tyle	ASSIMILATION		ACCOMM	ODATION	AFFILIATION
	5) Responsib	ility	HIGH		VAR	IED	LOW
	6) Preferred Contact Mode		VISUAL		VISUAL-TACTILE		TACTILE
D) Processing			IMPLEMENT Premise		MIXED		PREMISE
1) Writing Value			HIGH		VARIED		LOW

administering a brief interactive questionnaire before the HIP. Patients are asked to characterize themselves on each of 10 dimensions, which can be grouped according to a patient's self-characterized style of concentrating, experiencing time, interacting with other people, and working with ideas. The questions are shown in Table 5-1 and the score sheet in Figure 5-4. We then discuss the contrast between the Dionysians (the high scorers) and the Apollonians; later we discuss the more ambiguous and balanced picture presented by the Odysseans.

Spatial Awareness

The first structure involves an individual's awareness of him- or herself in space or his or her capacity for focal absorption along the lines of the work of Tellegen and Atkinson (1974) and Posner and Peterson (1990). The dialectic of focal and peripheral awareness, so critical in the trance state itself, is a factor in all our experiences of concentration. We tend to describe ourselves as concentrating better when we lose touch with surrounding stimuli and focus intently on one or two points. Our concentration is always, to some degree, divided between focal and peripheral awareness. At different times, we surrender more or less of one to the enhancement of the other: The trance state is characterized by a relative increase in focal as opposed to peripheral awareness. The capacity to focus intensely can be tapped without a formal trance induction and characterizes the Dionysian style. These people tend to concentrate so intensely, for example, when watching a play or movie, that they lose their bearings in space and often report a sense of surprise and a need for reorientation at the end of a performance.

By contrast, the Apollonian's attention tends to be more widely scattered, scanning for conflict and comparison. The individual sacrifices some degree of focal intensity but is less likely to be misled by one particular distraction—for example, he or she is more likely to keep his or her bearings when taking a test. Thus, the Apollonian style of concentration is characterized by a predominance of peripheral in relation to focal awareness. These individuals never seem to lose track of where they are or of alternative issues in the way that Dionysians do, although Apollonians are, of course, also capable of intense concentration.

TABLE 5–1

Questions and Scoring for the Apollonian-Odyssean-Dionysian Personality Inventory

- A. Space awareness. Ask the subject, "As you concentrate on watching a movie or a play, do you become so absorbed in what is going on that you lose awareness of where you are?" If "no," circle A on the score sheet (see Figure 5–4). If "yes," clarify further by asking, "Do you ever become so absorbed in a performance that when the curtain comes down you are surprised to realize you are sitting in a theater?"
 - If "yes," circle D.
 - If "no," circle O.

If "not that much," circle O.

- B. Time perception. Ask the subject, "In general, as you perceive time, do you focus more of your attention on the past, present, or future or all three equally?"
 - If the spontaneous answer is "past-present" or "present-future," circle OD.
 - If "past and/or future," circle A.
 - If "all three," circle O.
 - If "present," circle D.
- C. Myth-belief constellation (head-heart). Say to the subject, "The French philosopher Pascal once said, 'The heart has a mind which the brain does not understand.' He said that there are two kinds of mind, the heart-mind and the brainmind. As you know yourself, to which of these two minds do you give priority?"

If "brain-mind," circle A.

- If "both" or "variable," circle O.
- If "heart-mind," circle D.
- C-1. Interpersonal control. Ask the subject, "As you relate to another person, do you prefer to control the interaction or do you prefer to let the other person take over if he or she wishes?"

If the spontaneous answer is "control interaction," circle A.

If "both" or "it depends," circle O.

If control is given to other person, circle D.

(continued)
TABLE 5–1

Continued

- C-2. Trust proneness. Ask the subject, "In your proneness or tendency to trust other people, where would you place yourself on a scale of average—above or below?"
 - If "low" or "below average," circle A.
 - If "average" or "moderate," circle O.
 - If "high" or "above average," circle D.
- C-3,4. Critical appraisal and learning style. Ask the subject, "As you are learning something new, do you tend to critically judge it at the time you are learning it, or do you accept it and perhaps critically judge it at a later time?"
 - If judgment is immediate, circle A.
 - If "both" or "varied," circle O.
 - If judgment is suspended or accepted, circle D.
- C-5. Responsibility. Ask the subject, "As you sense your responsibility for what you do, where do you place yourself on a scale of average, above or below?"
 - If "highly responsible" or "above average," circle A.
 - If "average" or "moderate," circle O.
 - If "low" or "below average," circle D.
- C-6. Preferred mode of contact. Ask the subject, "If you are learning something new and you know in advance that it is of such a nature that you can learn it clearly, safely, and equally well by either seeing it or touching it, which would you prefer—to see it or to touch it?"

If the response is to see or visualize, circle A.

If both modes are used or valued equally, circle O.

If the response is "touch," circle D.

D. Processing. Ask the subject, "When you come up with a new idea, there are two parts to it; one is to dream it up, and the other is to figure out how to do it. Of these two parts, which gives you a greater sense of fulfillment?"

If the response is to dream or think up an idea, circle D.

If both are satisfying or if it varies, circle O.

If the response is implementing or carrying out an idea, circle A.

(continued)

TABL	E	5-	-1
Cont	in	ue	ed

D-1.	Writing value. Ask the subject, "As you come up with or work out a new idea, is it necessary to write notes or do you feel your way through without writing?"
	If response is "must rely on writing notes," circle A.
	If response indicates minimal or small amount of writing, circle O.
	If response is "without taking notes," circle D.

Time Perception

Dionysians tend to telescope time, putting greater emphasis on the present (Figure 5–5). With their intense absorption in the "now," Dionysians tend to lose sight of the past and future. An objection may be

Scoring Sheet

Name Date	- ۴					
		Structur Apollonian -	ral Cluster Survey Odyssean - Dionysian			
A)	Spa	ice Awareness (SPACE)	Low Medium High	A	0	D
B)	Tin	ne Perception (TIME)	Past - Future Past - Present - Future Present	A	0	D
C)	МВ	C: Head - Heart (CONTENT)	Head Both Heart	A	0	D
	1)	Interpersonal Control	Self Varied Other	A	0	D
	2)	Trust Proneness	Below Average Average Above Average	A	0	D
	3) 4)	Critical Appraisal and Learning Style	Immediate Varied Suspend	A	o	D
	5)	Responsibility	Above Average Average Below Average	A	0	D
	6)	Preferred Mode of Contact	Visual Both Tactile	A	0	D
D)	Pro	cessing (PROCESS)	Implement Varied Imagine	A	0	D
	1)	Writing	High Varied Low	A	0	D



raised that one of the characteristics of the highly hypnotizable individual is his or her capacity to relive the past with dramatic intensity and surprising recall of detail. This is indeed true, but the distinguishing feature is that the past is relived as though it were the present, and in the reliving, past and future are likewise ignored. Dionysians' view of the past can be compared to freezing a frame on a motion picture reel. They are the kind of people who live for the moment and who are not overly given to worrying about past precedents or future consequences.

By contrast, Apollonians seriously view the past and the future, being very aware of the importance of the past and the pressure exerted by the future. They are inclined to carefully think through the consequences of their actions and to weigh alternatives. Apollonians tend to see things in parallel that Dionysians view in series, to borrow a metaphor from electronics. They have a tendency to avoid the gratifications of the moment as somewhat illusory and misleading in favor of the satisfactions of careful planning.

Myth-Belief Constellation

Figure 5–3 indicates that the myth–belief constellation, the mixture of intrapsychic familial and cultural beliefs that creates an individual's perspective of him- or herself and the world, has been divided into six substructures. Numerous related distinctions exist among the groups; this discussion is more descriptive than exhaustive.

The concept of a myth-belief constellation, or "metaphor mix," is consistent with Ortega y Gasset's description (from *On Love: Aspects of a Single Theme* [1957]) of our perception of reality:

Strictly speaking, no one see things in their naked reality. The day this happens will be the last day of the world, the day of the great revelation. In the meantime, let us consider our perception of reality which, in the midst of a fantastic fog, allows us at least to capture the skeleton of the world, its great tectonic lines, as adequate. Many, in fact the majority, do not even achieve this: they live from words and suggestions; they lead a somnambulant existence, scurrying along in their delirium. (pp. 38–39)

The difference in the myth-belief constellation—the mixture of private assumptions about the world related to intrapsychic develop-

ment, family beliefs, and cultural myths—is characterized by the affective-cognitive dialectic. Dionysians as a rule tend to operate more on their gut feelings about what is right. They view reason as helpful but not definitive, and they tend to trust in their gut judgments about people and making decisions. By contrast, Apollonians value reason more than feeling. They tend to be distrustful of feeling, in the belief that following one's feelings can lead to trouble, and that having a reason for doing something should be the ultimate arbiter of human conduct. This broad distinction implies differences, which are presented later, in the way Dionysians and Apollonians relate to others and acquire new information. In summary, Apollonians tend to be head-oriented; Dionysians, heart-oriented.

LOCUS OF INTERPERSONAL CONTROL The interpersonal styles of the two groups can be contrasted. Dionysians are characterized as operating somewhat on a radar that picks up affective signals. They are quite sensitive to the feelings of people around them and are prone to absorb and identify with such feelings. They are less interested in the ideas of others than in their actions and feelings. Apollonians seek confirmation in the thoughts of others, which they compare carefully to their own thinking. They help to rationalize what they do by seeking confirmation of their own ideas from other people. Nonetheless, they use their own ideas as a primary reference and as such they can be described as moving more on their own gyroscope than on radar. Apollonians use social support as a way of confirming their own mental processing.

Dionysians are prone to allow other people to control their relationships, at least overtly. The kind of individual who says, "I would rather let him decide," is often a Dionysian. On the other hand, when many Apollonians are asked, "When you are in a close relationship, do you like to let the other person make the decisions or do you like to be in control of things yourself?" they will frequently respond with a knowing look, "There's no doubt about it, I like to be in control."

TRUST PRONENESS AND CRITICAL APPRAISAL Our clinical experience indicates that Dionysians, in general, are prone to trust others in a relatively naive and uncritical fashion. Those with high trance capacity who come to psychiatric attention often report major problems in their lives resulting from naive and uncritical acceptance of other people's ideas. But this is a personality tendency even when it does not lead to serious difficulties, as in the following example.

A noted researcher, extremely competent and critical within his field of expertise, found himself repeatedly the victim of high-pressure salesmen. He once walked into a large department store, came out slightly dazed, and went home to report to his wife that he had acquired a brand new refrigerator. His wife looked him and said, "Why there's nothing wrong with the refrigerator we have now. Why did you get it?"

He responded, "Well, the salesman was so nice and it seemed like such a good idea at the time."

This example indicates a related attribute of the highly hypnotizable individual: a relative proneness to suspend critical judgment. The researcher, who was highly critical and somewhat skeptical of others in his primary area of investigation, found that in other areas of his life he was far too prone to trust people and to suspend his own critical judgment. The normal scanning awareness that he was hardly in need of a refrigerator was suspended in the face of his willingness to trust a stranger. By comparison, Apollonians tend to be extremely critical of external input and very prone to compare and contrast alternatives. They often describe themselves as skeptics by nature and may even be too reticent to get involved in new activities or enterprises without researching them carefully. This hypothesis receives some support in the work of Roberts and Tellegen (1973), indicating an incidence of greater proneness to trust among highly hypnotizable individuals.

LEARNING STYLE The learning style of the two groups can also be contrasted. Dionysians tend to learn by affiliation; they are characterized by an ability to throw themselves into new disciplines with relative ease and tend to soak up new concepts. Apollonians tend to learn more methodically. For example, they are unlikely to affiliate with a new school of thought without examining it tenet by tenet, piece by piece. Thus, their learning style is characterized more by assimilation than affiliation.

We have some clinical experience indicating that individuals with what is called a *photographic* memory or with truly prodigious recall

for certain details tend to be Dionysians. The capacity for seemingly total recall of detail has many characteristics of hypnotic age regression. One dental student reported feeling as though he cheated on his final examinations because he was able to picture the pages and diagrams of his textbooks in his mind while answering the questions. However, when it came time to apply the book learning to clinical work, he found himself in serious trouble. Although able to recall the textbook material, he had not integrated it into his physical behavior so that it would be useful to him in the coordination of his hands during clinical practice.

Typical learning involves a combination of affiliation and assimilation and these extremes are presented to illustrate the point, not to imply that Dionysians never assimilate or that Apollonians never affiliate.

RESPONSIBILITY Although the sense of responsibility has many developmental and cultural determinants, Dionysians as a group do not particularly pride themselves on being responsible, although they may fulfill structured social and vocational roles in a highly responsible manner. They tend to look to others for the guidelines of appropriate conduct, to live with a series of intense involvements rather than with involvement on a continuum, and, knowing this, they tend to neglect certain of their responsibilities at any one time. Apollonians often pride themselves on being extremely responsible. Their sense of organization of past and future make them hesitant to commit themselves, as illustrated by their high critical appraisal and assimilating style of learning; but once they make a commitment, they usually stick with it. They are often seen as the Rock of Gibraltar by their families, and their steadiness is a major asset. For example, it is our clinical impression that although it is somewhat more difficult initially for an Apollonian to make the commitment not to smoke, once he or she has made it he or she is much more likely to stick with it than a Dionysian.

PREFERRED CONTACT MODE Dionysians prefer tactile sensory input; Apollonians prefer more distant visual stimuli. When our patients are asked whether they would prefer to see or to touch a new object, the Dionysians are much more inclined to say they would prefer to touch it and the Apollonians to say that they would rather see it. Our clinical experience is that those forms of therapy that involve some sort of physical sensory input, such as yoga and

massage, seem to find ready acceptance among the highly hypnotizable and to heighten resistance among those who are difficult to hypnotize.

Processing

Finally, the style of behavioral processing or implementing of ideas seems to differ between Dionysians and Apollonians. As a rule, Dionysians are content to toy with ideas in their mind: to think and rethink things in an intense but somehow casual way. They are also more likely to achieve satisfaction from dreaming up new ways of doing things than from the actual process of implementation. Apollonians prefer the satisfaction of seeing that an idea is executed correctly. They often prefer to write out ideas as part of their process of thinking about them. Apollonians tend to be the kind of people who do not believe something unless they see it in print; Dionysians are more likely to value and retain information transmitted orally.

Apollonian and Dionysian Case Examples

The traits described in the preceding sections, among others, characterize differences among the people on the ends of the spectrum of intact but high or low hypnotizability—the Dionysians and Apollonians. These differences include spatial and temporal orientation, interpersonal behavior, and processing of ideas. The differences convey the importance of action, the value of feelings as opposed to thought, and many other assumptions about the world and oneself.

The following three cases illustrate the distinctions between a typical Dionysian and a typical Apollonian.

Case Example 1

N.M. was a 25-year-old married woman who presented for evaluation of a motor weakness that had not been responsive to medical treatment for 2 years. She was a warm, engaging

person who scored as a 4 intact on the HIP (induction score of 10) and also scored positively on the extra tests for grade 5. On questioning, she acknowledged having most of the attributes of the Dionysian. In addition, she reported having a good eidetic memory and having a special problem in saying "no." She had encountered difficulties in establishing her household because of standards imposed on her by her husband's parents. They expected her to be the manager of servants and lady of leisure, and she secretly preferred to be more active and independent in running her home. However, she found it impossible to assert herself in this matter, doubting her own right to have such feelings. Her physical disability became her way of overtly complying with the family pressure and at the same time making a metaphorical statement that the situation was damaging to her: that she was being "disabled" by family constraints.

Psychological testing revealed her to be an intelligent and basically intact woman with some hysterical features, depression, and guilt. She evidenced a sense of being at the mercy of her environment, easily threatened by external forces, and yet frightened by solitude. The tester noted that she retreated from her own hostile impulses because of a need to be a "good girl," especially to authority figures. She was described as frightened, insecure, and dependent. She was seen as somewhat preoccupied with her physical problems and in considerable emotional pain. There was evidence of some immaturity, but none of psychosis or organicity. The diagnosis was conversion disorder.

She responded rapidly to treatment with self-hypnosis (see Chapter 16, Psychosomatic Disorders and Conversion Symptoms, for further discussion of this aspect of the case) once pain and physical dysfunction were resolved. With certain cognitive guidelines provided by the therapist, she also made important changes in her way of relating to her in-laws.

Her high hypnotizability was consistent with her other Dionysian attributes—her good memory and capacity to concentrate, her sense of immersion in a situation, her proneness to trust and take direction from others, and the ease with which she used nonverbal somatic metaphors for expressing problems.

Case Example 2

H.D., a 54-year-old married scientist and father of two children, scored a 1–2 profile pattern (induction score of 5) on the HIP. He reported exclusively Apollonian features when questioned, such as orientation to the past and future rather than to the present, a tendency toward critical examination of new information, a tendency to be controlling in relationships, and a general head rather than heart orientation. He was quite successful in his career. He had presented for help to stop smoking and succeeded. In addition, he had some interpersonal difficulties, including a reputation for being hard and controlling and a preoccupation with guilt—he had married out of a sense of guilt over his girlfriend's pregnancy and viewed his marriage as an experience of duty rather than passion.

He was engaging yet judgmental with the therapist, noting several times during the first session his "satisfaction" with the rapport established. Some months after the first session, the therapist (H.S.) received in the mail a copy of an important lecture delivered by the patient with the following handwritten notation: "This lecture was written (and will be delivered) without smoking, thanks to H.S." This tone of self-confidence bordering on grandiosity permeated subsequent contacts with him.

Psychological testing revealed him to be an extremely intelligent, ambitious, and achievement-oriented man. The tester noted, "It is thus small wonder that, lacking a compassionate, empathic, emotionally giving personality, he has hurt others or failed to understand their personal errors or problems in the compulsive pursuit of his own goals." He was described as assertive and dominant with obsessional defenses and an introspective style. The tester noted the following: "His personal strivings and needs supersede any awareness of the needs of others; he is responsive to the pushes and pulls and strains within himself, to his fantasies, plans, needs, and goals, but not to any expression of similar needs on the part of others." He was found to be clearly nonpsychotic but willful, brooding, and somewhat obsessional.

The picture that emerged was of a man puzzled by the fact that people seemed to respect but not like him. He had solved

problems all his life, but creating and maintaining emotional bonds seemed to defy the organized solutions that marked his career. He was clearly dominant and structured, capable of perceiving alternatives and yet out of tune with his own emotions and those of the people around him.

Although both of the patients in the preceding cases had psychological problems, on the broad spectrum of mental illness they were well within the healthy realm. They had productive careers and families despite their difficulties. Their personality styles were in many ways polar opposites. N.M. was insecure about herself, dependent, emotional, and vulnerable to external manipulation. She responded to extreme external pressure with depression and a somatic metaphor of dysfunction. H.D., on the other hand, was self-confident, ruminative, organized, estranged from his emotions, and detached from the feelings of others. He viewed life in terms of problems rather than feelings, and elicited respect rather than affection from those around him.

Case Example 3

Approximately 25 high-powered industry executives met for a seminar. They were introduced to the cluster hypothesis and to the relationship between eye-roll and personality traits. Of the entire group, only one executive had an eye-roll above 2. His was 3–4, and he identified himself with most of the Dionysian features. His Apollonian colleagues asked him how he managed to be so successful in controlling an important power position. He said that when he was a college student his rich, successful uncle had warned him, "If you want to make it in this world, you'd better learn to be an S.O.B. like me." Using his uncle as a model, he affiliated with his marketplace manners and learned them well.

Bemused by this new look at himself, he said, "Today when I leave my office, I suppose I'll leave that Apollonian cloak on the desk, because I am a different person at home with my wife and children."

The group voted to call him a *closet Dionysian*. The Dionysian's capacity to affiliate with models makes this understandable. The reverse is not as easy; for an Apollonian to adapt to a Dionysian style requires so much analysis and questioning that it usually is not feasible.

Odysseans

The previous characterizations of Dionysians and Apollonians have been presented as dialectical oppositions. We recognize that no pure oppositions exist and for each trait some aspect of its opposite exists in each person. Focal and peripheral awareness provide perhaps the best illustration of this dialectical reality. Even a profoundly regressed hypnotized person retains some scanning awareness and can respond to commands and outside stimulation; likewise, even the most obsessional, critical person has a capacity to suspend scanning awareness and to focus intently.

But we see more of an integration of these oppositions in the Odyssean group, those within the middle range of hypnotizability. They are more difficult to characterize because they tend to have a more balanced synthesis of the opposites presented in the preceding pages. Indeed, many show a fluctuation between absorption and evaluation, something we have called the *action-despair syndrome*. Odysseans become engaged in a belief, activity, or relationship and then step back and wonder about it, often experiencing periods of despair. They tend to balance focal and peripheral awareness. Thus, they are capable of considerable absorption but tend not to become so involved in their focal task that they lose their spatial orientation as the Dionysians do. Odysseans' time sense is more balanced, incorporating aspects of the past, the present, and the future with no overall emphasis on one over the others.

Odysseans' approach toward affective versus cognitive standards of truth is also more balanced. Their premise system, which we identify as the myth-belief constellation, tends to emphasize both affective and cognitive components. Odysseans seem to be less prone to imbalance—that is, to overemphasize either affect or cognition as being solely important. They respond to questions about interpersonal control by saying that it depends on the situation; in some situations, they like to maintain control and in others they prefer to let the other person make the decisions. They tend to be only moderately trusting of other people and to make limited use of critical appraisal. Often, their approach is not an exact amalgam of these oppositions; rather, it varies depending on the situation. In some situations, Odysseans note that they tend to be more critical and skeptical, whereas in others they are more trusting and accepting.

Odysseans' style of learning can be characterized as accommodation—a compromise between affiliation and assimilation. They recognize that they must change in the process of learning, but they also tend to actively transform new information into a usable form. In this sense, the term *accommodation* is similar to Piaget's (1954) use of it in developmental psychology to suggest that the process of learning involves both active interaction with the environment and the necessity of change in the learner. Odysseans view themselves as moderately responsible and have no extreme preference for sensory mode, either visual or tactile. Likewise, they take pleasure in both developing and implementing new ideas and do not clearly show preference for either oral or written language.

In relation to the Dionysians, who can be characterized as changing themselves to absorb directions and new ideas from their environment, and the Apollonians, who have rather firm rational standards to which they bend their environment, the Odysseans may best be seen as a group of individuals for whom the problem of changing in response to the world around them is especially important. These individuals recognize some necessity to modify themselves in response to pressures from the outside, but such change is not automatic and the necessity to change carries problems with it. Any change requires a capacity to give up and mourn old ways of believing and being. Odysseans may have periods of sadness or despair in their normal development, which involves giving up old parts of themselves as they change. More serious stress may elicit pathological states of depression or withdrawal, but in general a certain amount of sadness is a normal part of their lives.

This kind of changing can be characterized as the action-despair syndrome. Odysseans tend to alternate in the compulsive triad model between compliance and a kind of affective rationalization. They will act, but later reflect and wonder why. Their rationalizations will not be far from the original input. They can immerse themselves in the here-and-now but then retreat to the broader perspective of past and future. Their approach to life is the most dialectical in an obvious and unconscious way: They weigh alternatives, tend to comply and rationalize their choices, but do not give excessive weight to either aspect. They seem in many ways to be a synthesis of the extremes outlined earlier for Dionysians and Apollonians, but they have special characteristics of their own.

The outstanding characteristic of people in this mid-range group is a periodic fluctuation throughout their lives between intense activity and contemplative withdrawal from this activity, marked by despair and diminished productivity. The actress described in the following case sought psychiatric help during such a period of despair in her career. She scored 2–3 on the profile score of the HIP (an induction score of 7).

B.L. was a 40-year-old married actress and college graduate. She sought help on the advice of her coach because of anxiety about performing in a new production. She described herself as meticulous, demanding, and a perfectionist about her own performance. She was terribly concerned about this new anticipated play, having a feeling that she would not meet her usual standard. Because she had no previous psychiatric history, revealed an intact profile, and the performance was due within a week, the entire session focused on training her to use self-hypnosis to bring about a state of relaxation. She was taught to experience a sense of floating relaxation, which she practiced experiencing in the trance state throughout the day as a means of mastering her performance anxiety.

One month later she returned, feeling exhilarated. The play was a success, the critics had praised her performance, and she herself felt that she had outdone herself. Her coach also confirmed her success. She now expressed curiosity as to why she had gotten into such a jam. Responding to her curiosity, we undertook a more detailed exploration of her career and personality structure, and obtained psychodiagnostic testing.

Her first husband was a possessive and controlling man who used her as an extension of his own theatrical career, although he did give her early training and opportunities to perform. For many years, she did not challenge his direction, but came to realize as she matured that he was stifling her development. She finally made the decision to divorce him and to pursue her career on her own. In retrospect, she and her teachers realized that her early experience had been too scattered and she had received too much undiscriminating praise, hindering her personal and artistic growth. Several years later she remarried, this time choosing a more secure and independent man who was supportive of her career but not overly invested or dependent on it.

In spite of her happiness in this much better marriage and her continued prominence, critics pointed out something that she was more and more willing to admit to herself: She was not fully expressing her talents. As she became more frightened of performing, she recognized that she was conveying this uncertainty to her audience. The critical reviews of one performance in particular, several years earlier, were so negative that she decided to reexamine her career to learn from the experience. She sought further coaching after having considered and rejected the idea of an early retirement. She began to rebuild her confidence, in terms of both the technical aspects of her craft and her personal life.

Psychological testing revealed that she was an intelligent but somewhat emotionally constricted woman entering an important transition period in her life. Her desire for approval had made her cautious, vigilant, and overly dedicated to achievement. The testing indicated that she was opening up and getting in touch with underlying feelings of depression, guilt, extreme sensitivity, and vigilance toward other people; however, the psychologist noted that these feelings were related to assertive rather than aggressive strivings within her. She seemed unused to self-searching or personal preoccupation but had newly developed concerns about her own anxiety. In sum, she was seen as a constricted, moderately depressed person with conflicts revolving around dependence, independence, guilt, and anxiety. There were obsessional features, especially her perfectionism on the Bender Gestalt, along with affective components of depression and guilt.

The picture emerged of a woman who was a synthesis of extremes. She showed some preoccupation with perfectionism, achievement, and a tendency toward emotional constriction. At the same time, she was capable of experiencing depression and anxiety and had been sufficiently insecure and compliant to allow herself to be exploited by the more domineering people in her life. She experienced herself as caught between her desires for achievement and her emotional doubts about her motives and the quality of her performance. Her first marriage had served to confirm her doubts about her worth as a person, although her second marriage helped her develop a greater sense of self-assertiveness, value, and feeling worthy of being loved. Her career had undergone a similar fluctuating course. Early in her career, she emphasized intense activity and was in some senses an overachiever. She then entered a period of despair and withdrawal, during which she doubted the entire value of her talent and work. It was only by going through a life crisis that she used her doubt to improve her actual performance.

She thus typifies the action-despair syndrome of the Odyssean group, and the Odyssean compromise between the extremes of Apollonian perfectionism and Dionysian emotionality and compliance. It is interesting that her curiosity was stimulated for the difficult exploration necessary to gain this perspective on her life only after she underwent a mastery experience in relation to therapeutic intervention, and furthermore, that this insight with regard to her life came in her fifth decade.

As a middle group on the hypnotizability spectrum, and by far the largest group, Odysseans are closest to what may be called a *psychiatrically healthy population*. They seem able to integrate the advantages of hypnotizability without becoming victimized by a kind of exaggerated proneness to using the trance state. We do not mean to imply that there are no healthy people in the other groups or that Odysseans are all healthy. Rather, we are describing a tendency toward the integration of different capacities. An article of faith with us is that the healthier people are, the more difficult it is to describe them with any degree of accuracy. Their very freedom to choose makes them less predictable.

Concept of Personality Style

We have thus far outlined characterological differences among the three personality clusters as distinguished by the HIP. A word about the distinction between character style and personality disorder is now in order. This discussion pertains to the Apollonian, Odyssean, and Dionysian groups containing people in what is commonly described as the typical spectrum, hence our use of the term *styles*, and excluding those with serious personality, thought, affective, or organic disorders.

Individuals with organic disorders are discussed in Chapter 7, Hypnotizability and Severe Psychopathology.

We have described people with certain styles of thinking, feeling, relating to others, and concentrating, among other styles. As such, those described comprise the range of normal human differences. Even those on the extremes—for example, a grade-1 Apollonian who is highly cognitive or a grade-5 Dionysian who is quite affect-oriented and compliant—may lead normal lives. We predict, however, that should such people undergo psychological stress, either internally or externally generated, they would be likely to decompensate in ways predictable for their character style.

In stressful situations, the Apollonian probably will bind whatever uncomfortable affect he or she is feeling with obsessional rationalizing and compulsive rituals, or express the affect by attempting to control others or projecting his or her beliefs onto others. The Dionysian will exaggerate the tendency for compliance and find new people to comply with to avoid thinking about old problems, and develop dramatic new affects to isolate and replace those that make him or her uncomfortable. Our point is that each group will have characteristic modes of decompensation, or they may never get into such difficulty. Apollonians tend to decompensate in the obsessivecompulsive direction, Odysseans in the direction of alternating between periods of action and despair or depression, and Dionysians in the direction of dissociative or conversion symptoms. These characteristic types of decompensation are represented in Figure 5-2 by the light, displaced triangles. In terms of the three aspects of the compulsive triad, Apollonians tend to degenerate into rationalization, Dionysians tend to degenerate into compulsive compliance, and Odysseans are prone to fluctuate between compliance and depressive reflection.

Centering

This brings us to the concept of "centering" (Figure 5–6). In subsequent chapters, we discuss the uses of centering on personality differences in psychotherapeutic exploration. It is worth noting now, however, that as a rule we consider it a realistic goal for psychotherapy to help a person get back to the center of his or her characterological tendencies from a decompensated position. Looking at the structural diagram in Figure 5–6, Dionysians are encouraged to



think more and do less in effective psychotherapy. Some mixture of consolation and confrontation is recommended to help Odysseans deal with swings between action and despair that may have gotten out of hand.

The main point is that we try to help a person understand and accept his or her own personal style but to keep that style within manageable limits. We never expect to make a hand-washing rationalist out of a Dionysian nor a seductive, dissociated complier out of an Apollonian. We hope to help people center on their own capacities and limitations.

Our characterization of these styles was influenced by the work of Shapiro (1965) in his book *Neurotic Styles*. Although he emphasized the pathological rather than the adaptive aspects of what he called the *neurotically related styles*, both aspects are conceptualized in the following:

I do not mean to say that any single mode or style can describe all areas of an individual's functioning, but only that styles or modes may be found that are capable of describing general aspects of function (such as cognition, emotional experience and the like), modes that themselves will then be related and organized. Such consistencies of individual functioning as those between symptom and adaptive trait may be conceived as reflecting such general modes giving shape alike to symptom and nonsymptom, to defense against impulse and adaptive expression of impulse. They are presumably slow to change and therefore guarantee not only an individual's consistence but also his relative stability over long periods of time. (p. 4)

He goes on to describe four types of neurotic styles: obsessivecompulsive, paranoid, hysterical, and impulsive. We see the obsessivecompulsive individual as described by Shapiro as a decompensated Apollonian subgroup, and likewise the hysterical persons as decompensated Dionysians.

Creative Personality Styles

One way to underscore the potentially adaptive value of personality styles of this type is to look at personality differences among highly creative and productive individuals. Paul Johnson (1988) has done just that in his book *Intellectuals*.

Summary

Our hypothesis that three distinct clusters of personality traits exist that characterize individuals in the high, mid-range, and low-intact spectra of hypnotizability grew initially out of clinical experience. In particular, observations were made among highly hypnotizable patients that indicated such trance-related features as a naive posture of trust, a tendency to readily affiliate with new ideas, and a tendency toward intense involvement with other people with a dependent quality. We then looked clinically for complementary characteristics among individuals with intact-low profile scores, and we defined certain characteristics of Apollonians in contrast to the Dionysians. Finally, a midrange group, the Odysseans, was described and characterized primarily by the action-despair syndrome, a tendency to fluctuate between periods of intense activity and involvement in the world and periods of withdrawal and despair over the "meaning of it all."

In terms of the compulsive triad model presented at the beginning of this chapter, certain predictable differences in an overall sense characterize Apollonians, Odysseans, and Dionysians. Apollonians emphasize rationalization and are relatively noncompliant-they value reason above all. Dionysians compulsively comply with external signals, whether presented in a formal hypnotic setting or not, and are frequently amnesic to the signals. They have little interest in rationalizing their behavior, however. Odysseans fluctuate between periods of intense activity and times of withdrawal and despair, alternating between compliance and rationalization. They tend to value both reason and action, with the balance shifting back and forth during the course of their lifetimes. In Chapter 9, Formulating the Problem, we present strategies for approaching patients with these different cognitive and affective styles. The cluster hypothesis is presented as a means of providing the clinician with a shortcut to speaking the patient's language, designing an approach to treatment that addresses a given patient's needs and resources for implementing change, and treating the person as well as the problem.

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CHAPTER 6

Review of the Literature: Hypnotizability and Personality

Any attempt to relate hypnotizability to clusters of personality style and psychopathology must take into account the intense and frequently disappointing efforts to relate hypnotizability to performance on a variety of psychological tests and clinical measures. A large and divided literature on the relationship between hypnotizability and personality characteristics exists. Each tentative correlation seems to be more than matched by a failure to consistently relate an aspect of personality to trance capacity. This finding is surprising in view of the relative simplicity and stability of existing measures of hypnotizability. As David Rosenhan (1969) has said, "It is nevertheless an odd situation that a trait as stable as hypnotizability should vield no stable correlates with other measurable dispositions" (p. 193). We have reviewed the literature on personality correlates of hypnotizability to identify areas that are consisand inconsistent with our cluster hypothesis. Major tent contributions in this area were made as the concept of hypnotizability as a trait became firmly established. In this chapter, we review the literature relating this trait to various pencil-and-paper psychological tests in a normal population.

There is clear evidence that the trait of hypnotizability varies among individuals but is relatively stable in a given individual over time. Morgan, Johnson, and Hilgard (1974b) obtained a test-retest correlation of 0.60 with a 10-year interval between administrations of the Stanford Hypnotic Susceptibility Scale (SHSS), Form A—despite major changes in life circumstances of the subjects. More recently, Piccioni et al. (1989) tracked down former Stanford undergraduate students 25 years after they had been tested on the SHSS. The researchers found a remarkable 0.7 test-retest correlation at this interval. Such a relatively stable trait with such clear individual variance should surely be related to some other traits.

In broad strokes, the literature at first cited disappointing efforts to relate standard psychological tests to standard measures of hypnotizability. A more empirical, grounded, theoretical approach gradually yielded more results; several groups found that measures of hypnotic-like experience in normal life were positively correlated with hypnotizability. The research literature now demonstrates that highly hypnotizable subjects knowingly and/or unknowingly make frequent use of their trance capacity. This ability to use trance capacity influences elements of these subjects' behavior and their style of experiencing events around them. Research on hypnotizability and personality suggests that fruitful correlations will most likely emerge from personality measures that are grounded in aspects of the hypnotic experience.

Early Studies

Brenman and Gill (1947) reviewed the literature on personality and hypnotizability and came to the following conclusion:

It must be apparent even from this brief survey of the meager literature that there is neither clinical nor experimental data sufficient to draw any conclusions regarding either the personality characteristics of the good hypnotic subject or the psychiatric syndromes that are most susceptible to hypnosis. There exist reports of successful hypnosis in almost every nosological category, and there also are reports of utter failure in all. (p. 340)

Two later major reviews of the literature written 12 years apart indicated a trend toward cautious optimism about correlations between personality traits and hypnotizability. Deckert and West (1963) noted a general correlation between hypnotizability and intelligence. Hilgard (1975; Hilgard and Hilgard 1975) noted the development of four promising areas: "imagery, imaginative involvements (absorption), creativity, and cerebral function (especially hemispheric laterality)." We review the neurophysiological data in Chapter 8, Neurophysiology of Hypnosis. A wide variety of pencil-and-paper personality tests have been used. Davis and Husband (1931) compared a scale of hypnotic susceptibility that they had developed to a series of tests measuring intelligence, maladjustment, introversion, prejudice, and affectivity. Their findings were generally negative, with two exceptions: They found a 0.34 positive correlation between hypnotizability and intelligence, as well as a tendency for "introverted" females to be more hypnotizable. They used this data to deny Janet's assertion that hypnotizability is related to neurosis (Janet 1889, 1907).

Hypnotizability and Sociability

Weitzenhoffer and Weitzenhoffer (1958) used the Guilford-Zimmerman Temperament Survey and came up with conflicting findings. The Weitzenhoffers tested Charcot's assertion of a link between neuroticism and suggestibility, with negative results. They found no significant correlation between hypnotizability and the Guilford-Zimmerman scale in a population of 200 college students.

In the early 1960s, Levitt et al. (1963) correlated results on the same scale (i.e., the Guilford-Zimmerman Temperament Survey), as well as on the Edwards Personal Preference Inventory, among others, with the SHSS. In a small sample, they found that low-anxiety, high-dependency individuals were highly hypnotizable. However, individuals in the high-anxiety and low-dependency complementary group were not refractory. Thus, they found that certain combinations of attributes had predictive value, although the converse combinations did not. Their suggestion that a pattern approach should be taken—that is, researchers should look for patterns or combinations of traits in correlation with hypnotizability—became an increasingly common theme in later literature.

In a second study, Levitt et al. (1965) measured personality correlates of nonhypnotizability in a larger group. They noted the following:

The refractory students are less friendly, outgoing, credulous and tolerant of others, and more aggressive, dominant, independent, critical and suspicious. They are also more anxious and tend toward greater emotional instability. (p. 507)

These results nicely complemented the earlier study of Barber (1956) who at the time was espousing the "good guy" hypothesis of hypnotizability. Our data suggest that two groups were combined in the results of the Levitt study: those who were indeed emotionally unstable, and those with Apollonian characteristics, who were notably less credulous and tolerant of others and more dominant, independent, critical, and suspicious.

Several studies pursued the relationship between hypnotizability and interpersonal orientation. Bentler (1963) found consistent positive correlations between hypnotizability and subjects who described themselves as "docile, dependent," "cooperative, overconventional," and "responsible, hypernormal." Roberts and Tellegen (1973) studied self- and group ratings in interpersonal trust in relation to the Harvard Group Scale of Hypnotic Susceptibility (Shor and Orne 1962). They tested a population of undergraduate students who knew one another fairly well. The students who rated themselves as highly trusting proved to be very hypnotizable. However, being rated by others as very trusting did not indicate enhanced hypnotizability. There was some evidence that high hypnotizability was associated with perceiving oneself as trusting, dependent, cooperative, responsible, and nonanxious. Low hypnotizability was related to being aggressive, independent, critical, anxious, and emotionally unstable.

The Maudsley Personality Inventory

A number of studies were done with the Maudsley Personality Inventory. Furneaux and Gibson (1961), associates of H.J. Eysenck, studied a population composed of 55 college students and 44 adults who were not college students, all of whom were readers of a radical journal. Their methodology was complicated by the fact that they dropped 22 subjects who they deemed "liars" on the basis of a lie scale that they administered. Furneaux and Gibson found that the "liar" group was, on the whole, less hypnotizable. Among those labeled "honest," there was no simple correlation with the well-known extroversion/introversion dimension or with the stability/neuroticism dimension. However, they found that stable extroverts and neurotic introverts were relatively more hypnotizable than neurotic extroverts. These data added to the growing chorus of opinion that a single measure would not suffice; combinations of factors seemed more productive in relating personality to hypnotizability.

The peculiar assortment of subjects in the Furneaux and Gibson study led other investigators such as Hilgard and Lauer (1962) to question the positive results of that study. Evans (1963) also criticized the Furneaux and Gibson study: He reworked the data and questioned the separation of the group labeled "liars." He noted that other studies had not shown significant differences in the hypnotizability of those labeled "liars." Recalculating the results with the "liars" group yielded no significant findings, although it revealed a trend relating suggestibility to stability and introversion—a result that conflicts with the results of the original study.

The results of a later study by Vingoe (1966) using the Eysenck Personality Inventory were negative, although Vingoe noted that extroverts were more willing to participate in the experiment and were better predictors of their own hypnotizability. Similarly, Duke (1968) reported no correlation between hypnotizability and a scale of inner/ other directedness based on David Reisman's work.

Likewise, Silver (1973) found no relationship between hypnotizability and the use of repression as a defense, although he did find that a relatively "bright" mood was related to hypnotizability. Silver speculated that relative happiness might be a significant predictor, especially just before the assessment of hypnotizability, but also as a trait. His study supports the idea that hypnotizability is consistent with general mental health. This concept reflects our finding that those who are significantly depressed are not hypnotizable (D. Spiegel et al. 1982).

The Minnesota Multiphasic Personality Inventory

It was inevitable that hypnotizability studies would be done with the widely used Minnesota Multiphasic Personality Inventory (MMPI). As with previous efforts, the results were mixed, at best. In 1950, Sarbin published a long paper in which he discussed his concept of hypnosis as a role-taking behavior. In his paper, he briefly mentioned a study with 70 undergraduate students in which he used the MMPI

and unstated criteria of hypnotizability. He discarded approximately one-half of the subjects as nonhypnotizable and reported that the Hysteria Scale of the MMPI could be used to significantly differentiate somnambulists from those capable of a light trance.

Although the technique of dropping half of the subjects may be considered questionable, Sarbin may have happened on his interesting finding by doing so (i.e., by dropping those subjects with decrement profiles and leaving the subjects with intact moderate and high hypnotizability). The role-theory portion of the paper does not seem to take into account the fact that a trance may occur easily without formal induction. Furthermore, calling hypnosis a role does not account for the significance of individual variance in hypnotizability.

An earlier study by Eysenck (1943) contradicts Sarbin's finding. He tested 60 subjects equally divided by sex and a clinical diagnosis of hysteria or nonhysteria (either depressed or nondepressed). He found no distinction in hypnotizability among the groups, noting only that highly hypnotizable people tended to be more intelligent. Using various behavioral measures of suggestibility, he also isolated factors designated as primary and secondary suggestibility. Primary suggestibility consisted of ideomotor measures and was described as more reliable. The usual ambiguities attending diagnosis and the role of experimenter expectation seem especially applicable to this study.

Wilcox and Faw (1959), using the MMPI and personal diaries, found that highly hypnotizable subjects were, on the whole, better adjusted. They found a group among the less well-adjusted but hypnotizable portion that scored high on the Hysteria Scale of the MMPI. The less-hypnotizable group showed signs of depression, insecurity, and distraction by bizarre thoughts and feelings. In spite of these findings, no relationship was found between hypnotizability and diagnosis of neurosis, behavior disorder, or thought disorder (Faw and Wilcox 1958). That they did not find a connection between hypnotizability and diagnosis of a mental disorder is to be expected; their study merges subjects having intact but low hypnotizability with those more seriously impaired individuals who would probably have decrement profiles on the Hypnotic Induction Profile. The results of the Wilcox and Faw study do imply a general relationship between hypnotizability and mental health.

Subsequent studies with the MMPI were not so encouraging. Schulman and London (1963) found no impressive correlations between the MMPI and the SHSS, but they noted a tendency for moresusceptible people to score as less aggressive and more compliant. They concluded with the following refreshing suggestion: "It is time to stop doing studies like this one and to seek a fresh approach" (p. 160).

Not heeding this advice, Zuckerman et al. (1967) found no significant correlations between the MMPI and the Harvard Group Scale. They found, as did Silver, that emotional state was relevant to hypnotizability. In this case, highly hypnotizable subjects were, as a whole, less hostile. The researchers argued from the results of this study that affect states are more important than affect traits in measuring hypnotizability. Their conclusion seems somewhat hasty in view of the ambiguous distinction between an affect state and a trait—certainly many affective states are characteristic of people even if not picked up as such on the MMPI. Thus, although several earlier studies with the MMPI seemed promising, more recent work with it and other standard personality measures indicates the difficulty of establishing reliable correlations with these instruments.

Hilgard and Lauer (1962) used a different personality scale, the California Personality Inventory, in a population of more than 200 undergraduate students, and they compared the results with the SHSS. They found no reliable correlation and pointed to promising work with questionnaires to measure hypnotic-like experiences as more useful than evaluation with standard paperand-pencil measures.

Hypnotizability and Hypnotic-Like Experiences

Some interesting results have come from the study of hypnotizability and hypnotic-like experiences, notably the work of Shor et al. (1966), Ås and Lauer (1962), and Tellegen and Atkinson (1974). In various ways, they constructed scales of experiences in ordinary life that are reminiscent of the trance state and related such experiences to formal measures of hypnotizability.

In an early study, Shor (1960) found that undergraduate students quite commonly reported hypnotic-like experiences. He and others then administered a questionnaire that included inquiries about the intensity of the hypnotic-like experiences (Shor and Orne 1962). Shor found no convincing correlations between hypnotizability and

the frequency of occurrence of hypnotic-like experiences, but he did find impressive positive correlations with the intensity of such experiences. Shor then made observational measures of hypnotizability and found that the intensity of hypnotic-like experiences correlated especially well with those subjects who proved to be highly hypnotizable. He went on to assert the following: "It follows further that multiple correlations composed of both ability and nonability factors would predict hypnotizability along the entire continuum of hypnotizability" (Shor and Orne 1962, p. 160). (This is the kind of approach we are attempting to use in studying hypnotizability in relation to nonhypnotizability.) Then, using his concept of "plateau hypnotizability"that is, the concept that some training is needed to reliably reach a given subject's optimal state of hypnosis-Shor ran a complex series of correlation studies on a population of people skewed in the direction of much experience with hypnosis and high hypnotizability. Citing Rosenthal's studies of the effects of expectancy on outcome, Shor (1960) noted that it is not unlikely that the investigator's particular interest might lead to false correlations through sampling errors or through variations in the interactions between the experimenter and subject.

Shor expected no correlation between personality characteristics measured by the MMPI and other tests and hypnotizability. He discovered, in fact, no significant correlations with any of the measured personality traits. By his own description, the population studied was relatively highly hypnotizable, which may have obscured differences (i.e., one would see only the variance between the moderately and highly hypnotizable persons rather than between persons of low and high hypnotizability). Surprisingly, he found a negative correlation between hypnotizability and intelligence, as measured by the Wechsler-Bellevue Intelligence Scale Form II, and a positive correlation between hypnotizability and female gender. He did, however, confirm their earlier observation of a clear correlation between personal hypnotic-like experiences and hypnotizability (Shor et al. 1966).

A study of cognitive control by Goldberger and Wachtel (1973) provided independent confirmation of one aspect of Shor's studies. They found a high tolerance for unrealistic experience and a high resistance to interference in the more hypnotizable individuals. Orne (1966), however, sought to limit the concept of the applicability of hypnotizability to the general life experience of the highly hypnotizable subject. He denied the existence of a general tendency toward compliance among highly hypnotizable subjects and cited as an example a study in which he asked individuals who had previously been hypnotized to mail postcards back to him on a daily basis. He found no relationship between hypnotizability and the number of postcards returned. He also found highly hypnotizable subjects to be somewhat less punctual for appointments than less hypnotizable subjects.

Orne proposed that the crucial leverage in hypnosis is the capacity to create distortions of perception and memory that can then lead to changes in behavior rather than a tendency to comply. His findings are interesting, but one wonders about the demand characteristics of the experimental situation. Our experience is that highly hypnotizable individuals are quite sensitive to subtle cues: Is it possible that Orne's individuals somehow sensed that excessive compliance was not encouraged? Time is another consideration in reviewing these experiments. In our experience, highly hypnotizable individuals tend to throw themselves into a succession of activities with intensity. Orne's subjects may have begun complying with signals from other people. What he observed may have been a shift in compliance rather than a lack of it.

Ås (1962) took a similar approach to studying the relationship between scores on the SHSS and the personal experiences questionnaire administered to 50 male undergraduate students. He found significant correlations that indicated that the more hypnotizable students had a greater number of experiences in four areas: 1) "peak experiences," 2) "experiences of unusual states," 3) "wish to indulge in emotions and sensations with the feeling of just letting go," and 4) "the feeling that by and large, other people are to be trusted." Ås noted that composite scores of experience items correlated more significantly than any individual experience. A factor analysis of a similar study on a larger population of female undergraduate students yielded two factors: one pertaining to the sustaining of the suggested effect over a short period, and the second involving a capacity for psychological change and social "influenceability" (Hilgard and Lauer 1962).

The studies of Ås, Lauer, and Shor yielded promising indications that a measure of subjective experience of trancelike states is related to formally measured hypnotizability. As the dependent variables became more flexible and closely related to the phenomena measured by the independent variable (i.e., hypnotizability), the findings became clearer. But this change was not true uniformly. Derman and London (1965) attempted to replicate some of the findings by administering a questionnaire drawn from the work of Shor and Ås, along

with the Harvard Group Scale, to some 400 undergraduate students. In spite of finding no impressive correlations, they considered the personal experience study promising. They concluded with an idea so simple that it is often overlooked: "If one wishes to assess and understand hypnotic susceptibility, the more powerful approach may be to examine hypnotic susceptibility directly" (Derman and London 1965, p. 543).

Hypnotizability and Imaginative Involvement

A major work in the area of hypnotizability and imaginative involvement is Josephine Hilgard's Personality and Hypnosis: A Study of Imaginative Involvement (1970). Hilgard was interested in discovering early-life developmental experiences that correlated with later hypnotizability. She used intensive interviews that were later correlated with the results of the SHSS. She found the capacity for deep imaginative involvement to be particularly important: "We found that the hypnotizable person was capable of a deep involvement and almost total immersion in an activity, in one or more imaginative feeling areas of experience-reading a novel, listening to music, having an ecstatic experience of nature, or engaging in absorbing adventures of body or mind" (Hilgard 1970, pp. 4-5). Using a retrospective approach, Hilgard went on to speculate that certain patterns of family involvement might allow for the development of hypnotizability. She found such patterns in her more highly hypnotizable subjects. She discussed three major developmental factors. The first factor was an early, deep involvement with an activity of a noncompetitive nature that challenges the imagination, such as reading. The second factor was a history of punishment given by a parent. Some willingness on the part of the subject to submit to impartial authority was also involved in this factor. The third factor was a strong history of identification with the opposite-sex parent.

There are always problems with retrospective analyses; it is never clear which variable influenced the other. For instance, did the inherent trance capacity influence family development, or vice versa? Such studies as Hilgard's cannot resolve this issue, which is further complicated by the fact that older children are more hypnotizable as a group than adults. Only after adolescence do relatively stable trance patterns emerge (Morgan 1973). Nonetheless, Hilgard's findings regarding imaginative involvement suggest that certain styles of interacting with other people and with the sensory world are associated with high hypnotizability.

Absorption

The notable lack of associations between traditional measures of personality and hypnotizability has been noted in the preceding paragraphs. However, developments in this area have been achieved through identifying personality characteristics that are more closely related to the experience and nature of hypnosis, such as the imaginative involvements outlined by Hilgard. The noted personality researcher Auke Tellegen productively extended this line of research. An interesting study by Tellegen and Atkinson (1974) using a personal experiences questionnaire approach lends support to Hilgard's description of the importance of imaginative involvement. They reported that absorption, defined as a capacity for absorbed and self-altering attention, was highly correlated with hypnotic susceptibility. The questionnaire that they developed covered such areas as absorption, dissociation, trust, impulsiveness, and relaxation, and they administered it to 500 female undergraduate students. They compared scores on this questionnaire with the modified version of the Harvard Group Scale and did a complex factor analysis that indicated that absorption was the most highly correlated factor with hypnotizability. The absorption factor was statistically distinct from the introversion/extroversion and neuroticism dimensions. They described the absorption trait as an ability to absorb oneself in perception, a kind of heightened reality in what is observed: "We suggest, in a similar vein, that the attention described in absorption items is a 'total' attention, involving a full commitment of available perceptual, motoric, imaginative, and ideational resources to a unified representation of the attentional object" (p. 269).

Correlations of similar magnitude between hypnotizability and absorption have been found in Denmark, irrespective of whether the testing was conducted in a "hypnotic context" (Zacharie et al. 2000). The absorption literature also makes it clear that hypnotizable people have hypnotic-like experiences regardless of whether they have ever undergone a formal hypnotic induction or have even thought about hypnosis.

This absorption trait is consistent with our description of the predominant mode of attention (focal) and method of learning (affiliation) for Dionysians. The ability to throw oneself into something, to involve oneself intensely in an experience, is part of what we call *the trance state*. It is a capacity often used, though unrecognized as such, by those individuals with high hypnotic capacity (H. Spiegel and Greenleaf 1992). This interpretation of the absorption data is consistent with Tellegen's observation that individuals high in absorption are more experientially and less instrumentally oriented (Tellegen 1981). The primacy of experience over intention or logic (Orne 1959) is a key element of the hypnotic state and of highly hypnotizable individuals.

Ego Receptivity, Negative Priming, Dissociated Control, and Turning Inward

Ego receptivity is another personality-related construct that has been tied to hypnotizability. It taps openness to social input that is designed to alter inner experience. Ego receptivity has been shown to be correlated with absorption and, together with absorption, to account for considerable variance in hypnotizability (Goodman and Holroyd 1992). However, this receptivity is a different construct from self-monitoring, which involves the extent to which people self-monitor their self-image in social interactions (Snyder 1995). It was hypothesized that if the social role–enactment explanation of hypnosis were true (Kirsch 1991; Kirsch et al. 1995), self-monitoring should be associated with higher hypnotizability. However, that was not found to be the case—the two are uncorrelated (Bachner-Melman and Ebstein 2002).

Another creative exploration of the personality attributes associated with hypnosis is found in a study of negative priming (David et al. 2001). The authors of this study hypothesized that the capacity for focal attention in hypnosis might be accompanied by a good ability to cognitively inhibit certain information, as measured by response latency. They found a 0.49 correlation between the latency of response to an irrelevant or disruptive stimulus and formally measured hypnotizability. One might think of this finding as the kind of cognitive activity that makes absorption possible. Varga et al. (2001) found a positive correlation between scores on the Harvard Group Scale of Hypnotic Susceptibility and the Phenomenology of Consciousness Inventory, which measures dissociated control, positive affect, and attention to internal processes. All of these recent findings are consistent with the understanding of hypnosis as a state composed of absorption, dissociation, and suggestibility.

However, "resistance" to hypnotic induction does not seem to affect the measurement of hypnotizability (Groth-Marnat and Mitchell 1998). When indirect inductions were used to bypass resistance, there was no difference in hypnotizability scores among "resistant" subjects. Nor is imagery ability correlated with hypnotizability (Kogon et al. 1998), which is surprising because many people can produce vivid visual images that can alter brain processing of stimulus intensity (Barabasz et al. 1999; De Pascalis 1999; D. Spiegel et al. 1985) or color (Kosslyn et al. 2000) while hypnotized.

Summary

It hardly can be said that the results of the psychological literature attempting to relate personality traits to hypnotizability are unambiguous. Nevertheless, certain trends do seem to be confirmed. High hypnotizability has been related to a generally bright mood, a somewhat naive and trusting approach to people, and emotional stability. Low hypnotizability has been associated with being less outgoing and more critical and suspicious. The occurrence of hypnotic-like experiences in ordinary life, a capacity for imaginative involvement, and an ability to experience absorption have all been related to high hypnotizability. More recently, studies have shown that people receptive to self-altering experiences, negative priming, dissociated control, and inner orientation are more hypnotizable than people without those characteristics.

The research that we cite in this chapter focuses mainly on personality attributes of highly hypnotizable people rather than those of people who are less hypnotizable, but the research does point to some useful distinctions when the dependent variables approximate aspects of the trance experience itself. It seems clear from this literature that highly hypnotizable individuals experience other aspects of their life using the trance mode and that this experience, in turn, affects their personality structure, cognitive and perceptual experience, and relationships with others. Thus, hypnosis is not a hidden, isolated ability that is stored away to be unlocked only by a hypnotist. Rather, it is an ability that can and does occur spontaneously and shapes many aspects of hypnotizable people's lives. This page intentionally left blank

Nonintact Profiles: Softs and Decrements

CHAPTER 7

Hypnotizability and Severe Psychopathology

Some individuals have little functional hypnotic capacity, not because of normal variability in the trait, but because of intervening psychopathology that impairs their ability to concentrate in a way that allows for hypnotic experience. This group of individuals who have in common little functional trance capacity are distinguished from those in the other three groups—Apollonians, Dionysians, and Odysseans—by their extremely low performance on the Hypnotic Induction Profile (HIP) Induction Score and by the fall-off of their behavioral response from the physiological predictor, the eye-roll (see Chapter 5, The Person With the Problem: Apollonians, Odysseans, and Dionysians). This group comprises two types of profile grades: soft and decrement. The soft profile is intermediate between those with intact profiles and decrement profiles. The levitation response is at the zero level, but the eyeroll and the control differential are positive. The decrement profile is defined by the absence of a positive score on the control differential item regardless of the levitation response, but the eye-roll is positive (score of 1 or greater). Our data clearly indicate a correlation between relatively severe psychopathology and decrement profiles and suggest that a soft profile is consistent with less florid but still serious pathology of a characterological or depressive type. These data are presented later.

As Table 7–1 shows, we have divided the serious psychological disorders roughly into categories of thought and affect following Bleuler's time-honored distinction. It is our impression, as yet unestablished statistically, that severe decompensations in Apollonians tend to lead to thought disorders and that decompensations in
TABLE 7–1

Hypnotizability (Hypnotic Induction Profile Score) and Vulnerability to Severe Psychopathology

Hypnotizability	None-Low	Medium	High
Type of Disorder	Cognitive	Mixed	Mood/Affective
Axis I disorders	Obsessive- compulsive Schizophre- nia	Impulse control Dysthymia Major depression Bipolar	Dissociative/ conversion Dysthymia Major depression Brief psychotic
Axis II (personal- ity) disorders	Paranoid Schizoid Schizotypal Obsessive- compulsive Narcissistic Avoidant	Antisocial Borderline	Histrionic Dependent

Dionysians tend to lead to affective disorders. The Odyssean style seems most related to reactive depression and withdrawal and to sociopathy: disorders primarily of behavior, with mixed affective and thought components. Such a working dichotomy between disorders of affect and thought is well established in classical psychopathology. In his work *Lived Time*, Eugene Minkowski (1970) reviews Bleuler's contribution in clarifying this distinction:

Bleuler expresses the difference existing from this point of view between the schizophrenic and the manic depressive by a formula which has since become famous. He said that we have no affective contact with the first while this contact is maintained in the second. (p. 72)

Minkowski then reviews the utility of connecting descriptions of people who are quite disturbed to those within the psychiatrically healthy range of human behavior: In genealogical research it is given an even more solid basis for this attempt to establish an inner bond between the overall behavior of the alienated on the one hand and normal individuals on the other. It is always the presence or absence of affective contact in the environment that serves as the guide for this comparison. (p. 73)

Thus, Minkowski is arguing that a description of all people based on the degree of affective connection is useful. The extremes of bipolar disorder on the one hand and schizophrenia and schizoid states on the other serve as guideposts for the classification of "normal" behavior. He goes on to provide a distinction among more mentally healthy people that is highly relevant to a discussion of trance capacity:

In taking up Kretschmer's research Bleuler is led to the notions of schizoidism and syntony. In going beyond the domains of characterology he sees in them the expression of two fundamental principles of life. Syntony alludes to the principle that allows us to vibrate in unison with the environment, while schizoidism on the contrary designates the faculty of detaching ourselves from that environment. Moreover these two principles, in spite of their apparently contradictory character, do not exclude each other. The one is as indispensable as the other...that is, far from being two contrary forces they have to do with two different sides of our being, the one as essential as the other. (p. 73)

The concept of "vibrating in unison" with the environment sounds very much like what we would describe as intact trance capacity, and the corresponding "detachment" as the more critical nontrance state. Different people are capable of different degrees of "vibration" and "detachment," and a given person will be in different states at different times. Yet this sensitivity to the environment is a relevant and useful variable and seems also connected to the relative importance of affect in an individual's life; hence, the connection between severe affective and thought disorders and the range of more typical human differences. We are indebted to Fromm-Reichmann (1950) and Sullivan (1953) for the perspective of mental health and mental illness as a continuum with underlying dynamisms that differ in degree but not in kind.

Review of the Literature: Hypnotizability and Severe Psychopathology

A clinical article by Copeland and Kitching (1937) provides an astute observation that foreshadowed more recent discoveries about hypnotizability and severe mental disorder. In particular, it highlights the utility of hypnotizability testing in discovering dissociative "mimics" of schizophrenia and serious mood disorders. Copeland and Kitching presented 20 cases in which hypnosis was artfully used in both the diagnosis and the treatment of inpatients. Of particular interest is their discussion of several patients who were seemingly psychotic but who were easily hypnotized and subsequently recovered quite quickly. Those patients who were not hypnotizable had worse outcomes, which were more consistent with the course of severe affective or thought disorder. The authors concluded:

Here we would point out what we find to be one of the values of hypnosis. Without exception, cases which presented as true psychosis could not be hypnotized. If susceptibility to hypnosis developed, we were compelled to revise the diagnosis. (p. 328)

Copeland and Kitching's findings present considerable evidence of low hypnotizability and the absence of very high hypnotizability among psychiatric patients with severe thought and mood disorders. We found, for example (D. Spiegel et al. 1982), that the hypnotizability of patients with schizophrenia averaged 4 on the Induction Score of the HIP, slightly more than half the mean score of the comparison nonpatient sample. Taking neuroleptic medication made little difference in hypnotizability scores (D. Spiegel 1980). Those with unipolar and bipolar depression had somewhat higher scores, averaging 6 on the Induction Score, but still significantly below the control norm. Those with generalized anxiety disorders had similarly low scores. There is evidence that the HIP is especially sensitive to the lower hypnotizability of schizophrenic and other seriously ill patients. Pettinati et al. (1990) measured the hypnotizability of 113 psychiatric inpatients and 58 psychiatrically healthy control subjects. They found significantly lower hypnotizability on the HIP, but not on the Stanford Hypnotic Susceptibility Scale (SHSS). This difference may have to do with the SHSS's

greater emphasis on behavioral observation and compliance, whereas the HIP emphasizes cognitive flow and subjective report.

The earlier literature was conflicting in regard to the hypnotizability of seriously disturbed patients. Researchers have variously asserted that schizophrenic patients are not at all hypnotizable and that they have the same trance capacity as individuals without schizophrenia. We have chosen several of the most systematic papers with differing points of view to analyze critically.

In 1964, Abrams published a review of the literature to date on the use of hypnosis with psychotic patients. He referred to three studies (Gale and Herman 1956; Heath et al. 1961; Wilson et al. 1949) of hypnotizability among psychotic individuals and compared some of their results to Hull's (1933) distribution of hypnotizability in a nonpsychotic population. Abrams' overall conclusion was that, although some psychotic patients seemed hypnotizable, as a group they were markedly less hypnotizable than the general population. He went on to note:

Certain factors have been suggested as causing the psychotic to be less hypnotizable. They would appear to be related to poor contact with reality, chronicity, deterioration, and uncooperativeness. (Abrams 1964, p. 80)

Abrams was interested in the treatment of psychotic patients with hypnosis and took pains to note that some patients diagnosed with schizophrenia seemed hypnotizable, although on the whole they were not. This review, however, used the hypnotic "depth" concept, which has largely been abandoned in the research literature in favor of hypnotic susceptibility or, preferably, hypnotizability. The issue is the trance capacity of the individual rather than the so-called depth of any given trance experience.

At approximately the same time, Barber et al. (1964) did a careful study of hypnotizability as rated by the Barber Suggestibility Scale among a population of 253 chronic schizophrenic patients. He noted that 59 patients were "untestable"—that is, they were uncooperative. He found the remaining group somewhat susceptible but on the low side as compared with control subjects (1.3–1.8 as compared with 2.2–3.5 on an 8-point scale). He concluded that it was difficult to hypnotize patients with chronic schizophrenia, and his results implied lessened hypnotizability of this group. In addition, the elimination of a quarter of the sample as untestable further indicated the inability of schizophrenic patients to be hypnotized. This problem plagues most studies of hypnotizability among psychotic patients: Many patients are so disturbed that they cannot cooperate. Yet in a study comparing the tendencies of populations, it seems reasonable to include those incapable of cooperating as nonhypnotizable.

In several studies on the hypnotizability of psychotic patients, Kramer noted equal or enhanced responsiveness as compared to control subjects. In the first study, he administered the SHSS to 25 psychotic inpatients (six others refused) and found higher than normal scores (Kramer and Brennan 1964). In another study, Kramer (1966) administered the Harvard Group Scale of Hypnotic Susceptibility to 25 of 28 patients chosen (three would not cooperate) and found the nonpsychotic and psychotic groups equally hypnotizable. Three of the 25 were later diagnosed with psychoneurotic tendencies. Among psychotic patients, the correlation of self and observer rating of hypnotizability was much lower than in control subjects: 0.43 versus 0.83–0.91. In a third study (Vingoe 1966), the author questioned his own results when only 15 of 46 patients completed the project. The uncooperative patients had similar diagnoses as those who complied with the protocol, and thus the two groups seemed not to differ. Again, the fact that the diagnosis impairs the ability of a substantial proportion of the population under study to participate should be considered relevant data and provides evidence of lower hypnotic responsiveness. The results of the retesting of 9 of the original 15 subjects in the hypnotized group, and the fact that the general level of contact in such a chronic group is extremely variable, suggest that the hypnotizability of the chronic psychotic hospitalized patient may be of a fairly unreliable nature. Although Kramer and his associates were inclined to think of psychotic patients as quite hypnotizable, the problems involving even minimal cooperation in a hypnotic testing situation could not be overlooked.

Gordon (1973), using SHSS Form A, reported significantly higher hypnotizability in a group of 32 schizophrenic subjects as compared with a group matched for age and drawn from a general medical and surgical inpatient service. It should be noted that the administration of the scale was modified to delete any reference to the term *hypnosis*. Lavoie and Sabourin (1973) obtained conflicting results when they used the same assessment procedure with a group of 56 chronic psychotic patients, primarily with schizophrenia, whose scores were compared to a control group score as defined by Hilgard (1965). Lavoie and Sabourin emphasized the distractibility commonly associated with schizophrenia as a factor that impaired concentration and therefore hypnotizability in their sample. Of particular interest is the fact that they found no psychotic patient scoring in the highest range of 10–12 on the SHSS.

Using a modified version of the Davis-Husband Scale (1931) and the outmoded hypnotic depth concept, Polak et al. (1964) reported that 16 of 28 chronic psychotic patients were at least somewhat hypnotizable. In a more sophisticated study, Greene (1969) used a modified version of the SHSS and obtained scores among psychotic patients similar to those reported as a norm for college students. Webb and Nesmith (1964) used a simple postural sway measure on a much larger group of patients and control patients (N = 490). They found significantly more responsiveness among the control population.

There have been numerous clinical reports of hypnosis used to treat psychotic illnesses with varying degrees of success (Scagnelli 1974, 1976; Zeig 1974). These reports are not discussed in detail here because this chapter focuses on diagnostic implications of hypnotizability rather than the therapeutic uses of hypnosis with psychosis. It is worth noting, however, that in general this literature describes some psychotic patients who respond quite well to hypnotic technique and others who are quite unresponsive. These results are interesting from a diagnostic perspective and are consistent with the idea that at least some highly hypnotizable psychotic patients are diagnosed with a hysterical psychosis rather than schizophrenia. These may well be the kinds of patients who have responded to hypnotic techniques.

The absence of any highly hypnotizable patients as measured by the SHSS in Lavoie and Sabourin's previously cited study with carefully selected psychotic patients is consistent with our hypothesis. Combined with the clinical observations of Copeland and Kitching (1937), these clinical and research data indicate that there may be something unusual about psychotic patients who prove to be highly hypnotizable in formal testing. Some of them may be unusual schizophrenic patients, although there is evidence that many schizophrenic patients have an impaired capacity to concentrate and tend not to be hypnotizable to a significant degree. It is our impression that some of these highly hypnotizable, psychotic patients have what can best be termed *hysterical psychosis* and have been misdiagnosed with schizophrenia.

Although some researchers and clinicians report mid-range or high hypnotizability among seriously disturbed populations, the previously cited results support the hypothesis that there is, at the least, something unusual about the hypnotic performance of psychiatrically disordered individuals. They tend to cooperate erratically and to

demonstrate disordered concentration. As we have noted, Shakow's (1971, 1974) work with schizophrenic patients provides a possible explanatory system for this observation. Thus, these data are in general consistent with our own findings that patients with thought, character, or affective disorders show little functional hypnotizability and frequently have soft and decrement profiles.

Our clinical impression is that such patients demonstrate an interference in their physiological capacity for hypnosis. This falloff is represented on the HIP by the gap between the eye-roll measurement and measurements of levitation and control differential. These patients' behavioral and subjective performances are below the biological baseline. For schizophrenic patients, this may be due to the fragmentation of attention and concentration-their distractibility and loose associations. For patients with paranoid or obsessional character disorders, the trance experience may arouse too much anxiety, suspicion, and fears about the operator controlling the patient. Individuals with sociopathy may fear that the hypnotic situation makes them too vulnerable to manipulation, a projection of their own style of dealing with others. Those with serious depressions may be so withdrawn and devoid of energy that they cannot attend to the input signals. Patients with manic depression, on the other hand, may be so energized and grandiose that they disdain following the instructions that are part of the trance induction.

Regardless of the phenomenology of the subject's experience, our observations on the HIP indicate a falloff of hypnotic performance from the biological baseline in association with serious psychiatric dysfunction, and this position seems to have some support in the research and clinical literature.

Hypnotizability and Depression

Patients with depression, characterized by withdrawal and dysphoric affect, show little willingness to comply with any external signals. Reason becomes morbid rumination; guilt and self-criticism are the predominant themes. The feeling of sadness overwhelms all of their functioning, and this affective state overshadows the actual reasons that exist in the world as causes of sadness. The massive interference that serious depression causes in an individual's intrapsychic and interpersonal functioning likewise seems to show itself in performance on the HIP. Depressed individuals often have soft or decrement profiles. A decrement performance in a mid-range or highly hypnotizable patient who otherwise seems fairly intact has been helpful to us in picking up masked depression that has been overlooked, as in the following example.

A man in his 40s sought help with hypnosis for recurrent muscular aches and muscle fatigue that had become so severe that they often hampered his work as an auto body repairman. He was a tall, strong, vigorous, single man who reported mild sleep disturbance and some decrease in appetite but no dysphoric mood. He related well and seemed to have minimal secondary gain from his pain and fatigue. He had an extensive medical workup, which included screening for an intracranial lesion and myasthenia gravis. All the medical and laboratory findings were negative. He scored a 3 decrement on the HIP. On the basis of this score, along with some somatic signs of depression, he was started on an antidepressant. Three weeks later, his pain and muscle fatigue began to improve, and 2 months after that visit, his pain syndrome had resolved on an adequate dose of antidepressant medication. This man had somatized his depression, and when the depression was treated. his somatic symptoms improved. In this case, the profile was helpful in making the correct diagnosis and in finding more effective treatment than hypnosis for this individual.

It has been our clinical experience that when Dionysians decompensate, they tend in the direction of depression, at times of psychotic proportions. Even if depression is not the primary diagnosis, it is frequently associated with the more severe decompensations of highly hypnotizable patients. This type of depression is distinct from the ruminative and less affective-laden despair of some decompensated Apollonians.

High Hypnotizability and Severe Psychopathology

High hypnotizability can become a platform from which recent and longer-lasting stressors and conflicts may be expressed, often with little conscious recognition or understanding of the connection between stress and symptom.

Brief Psychotic Disorder (Hysterical Psychosis)

Clinically, patients with hysterical psychosis appear quite floridly psychotic, but often the drama of their condition, especially its affective dimension, separates it clearly from schizophrenia and sometimes from mania. These patients respond to severe environmental stress with rapid psychotic decompensation from a previously good level of functioning. They may be delusional and have ideas of reference, loose associations, and affect that range from bland indifference (approaching flatness) to intense agitation. They frequently mobilize tremendous attention and anxiety from their social network. These patients often recompensate rapidly, especially when appropriate intervention is made in their environment (D. Spiegel and Fink 1979; D. Spiegel and H. Spiegel 1984; Steingard and Frankel 1985), as illustrated in the following example.

Michael was a 15-year-old boy who first presented to the hospital emergency room in an agitated and combative state and was placed in four-point restraints. He told the admitting physician that he was "possessed by demons of Satan." His family noted that he had begun speaking "in a bizarre awful voice, uttering obscenities, grunting, growling, and sniffing like a wild animal." On admission, his affect was noted as "flattened and mildly depressed"; he was suicidal and delusional; and his proverb interpretation was concrete, religiously oriented, and personalized. He was initially diagnosed with psychotic depression, and a few days later he was diagnosed with schizophrenia.

Michael and his twin sister were the youngest of five siblings in a middle-class, religious, Lutheran family with no prior psychiatric history. Three months before admission, Michael had been displaced from the bedroom he shared with his brother and moved to the bedroom of his 22-year-old, sexually active sister who was away at nursing school during the week but who returned on weekends, sometimes with her fiancé. Ten weeks before admission, he had become involved with his first girlfriend, but she left him 6 weeks later. At that time, he made a suicide gesture, and a minister told him that it was "Satan's work."

One week after admission, the patient was administered the HIP. His initial grade was a 4-5 and he was able to regress to his past as though it were the present. Using this regression

technique, he was able to relive the "possessed" states that had become periodic during his hospitalization. He was taught to bring on the attacks and thereby control them, and he began taking low-dose antipsychotic medications. Family therapy began, emphasizing that the family should remain calm during his "attacks" and that Michael should be given a bedroom of his own. He had a second brief hospitalization, was withdrawn from medication, and at 1-year follow-up had had no recurrences and was doing well. The final diagnosis was hysterical psychosis. (D. Spiegel and Fink 1979)

This case illustrates the dramatic quality of brief psychotic disorder and its responsivity to external control. The patient was rewarded for learning to bring on and then control his psychotic states. He had a high-intact profile, and his high hypnotizability was useful in differentiating the diagnosis from schizophrenia. Some of these patients may have decrement or soft profiles but with high eye-rolls. This case serves to illustrate that a hysterical patient may be quite psychotic and still be highly hypnotizable.

The differential diagnosis between brief psychotic disorder and bipolar disorder may also be difficult. We have seen several patients who were diagnosed with manic depression but whose symptoms were poorly controlled when taking lithium: They had high-intact profiles and responded well to a therapeutic strategy using selfhypnosis for anxiety reduction and behavioral control, as in the following example.

H.L. was a 52-year-old married mother of two who had suffered with bipolar disorder for 10 years. At age 46, she began taking lithium. Two years of careful adjustment of the medication resulted in some improvement, but her mood swings were not adequately controlled. She was referred for adjunctive treatment with self-hypnosis and scored 3–4 soft on the profile. Her responses to the cluster survey were in the Odyssean-Dionysian range. She was taught how to use self-hypnosis, with an emphasis on creating a sense of floating as a means of defusing her inner sense of pressure and anxiety. She continued to take the same level of lithium, but with the aid of this exercise she was able to contain her mood swings and has done well since then. As she improved, her repeat profile score changed to a 3–4 intact.

Dissociative Disorders

Patients with dissociative disorder include those with fugue states and other dissociative conditions often associated with hypnotic phenomena. The patient with dissociative disorder experiences a failure to integrate various aspects of identity, memory, or consciousness (American Psychiatric Association 2000). These patients generally have soft or intact high profiles. They frequently respond well to structured therapy, and the use of hypnosis to demonstrate the nature and potential for control over dissociative symptoms is often helpful. Regression techniques can be useful to demonstrate to the patient in a dramatic and immediate way his or her capacity for dissociation. This approach is a first step toward teaching mastery and control over the dissociation (see Chapter 20, Hypnosis in the Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder, and Dissociation).

Conversion Disorders

Conversion disorders include severe and immobilizing conversion symptoms such as paralysis and stocking-glove anesthesia of limbs. Patients with such symptoms in acute form tend to have high-intact profiles. Those with conversion symptoms in chronic form who have accumulated massive secondary gain and have become trapped by their own disability are more likely to have soft or decrement profiles. They may be chronically depressed as well. When dealt with acutely, these symptoms are often rapidly reversible, as illustrated in the following example.

A medic was returned from the battlefield unable to use either of his legs, although no organic basis for his disability was discovered. He and his unit had come under heavy fire. Just as the sergeant ordered the unit to retreat, the patient heard a friend cry for help and saw the foot of a soldier who might have been his friend lying behind a rock. However, he obeyed the order and retreated, and his friend never returned. He had presumed that his friend was still alive and that the foot he had seen belonged to his friend. He was overwhelmed with remorse at not having tried to rescue him, although he had indeed obeyed orders. This man was highly hypnotizable (he was seen before the HIP was developed) and was able to regress to the past as though it were the present. The intervention involved having the medic picture the situation he had fled on the battlefield with one modification: The foot he had seen was facing downward, with the implication being that the man was already dead. The soldier came out of the trance state with a sense of "discovery"; his friend was already dead and there would have been no point in trying to rescue him. Within a few days, he regained the ability to walk and was returned to active duty.

The soldier's high trance capacity (most likely in the 4–5 range) was used to help him cope with his overwhelming sense of guilt and entertain the probability that his friend was already dead. With that, he was able to disengage the somatic message that he should not have moved from the spot where his friend was wounded, and he regained the ability to walk (H. Spiegel 1965). For further discussion of hysterical conversion symptoms, see Chapter 20, Hypnosis in the Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder, and Dissociation.

There is accumulating evidence that high hypnotizability is associated with proneness to dissociative and conversion symptoms. For example, Agargun et al. (1998) found that higher hypnotizability on the eye-roll was associated with *lower* pain threshold to a mechanical pain stimulus and with a greater proneness to dissociative symptoms. Although one might expect a higher pain threshold among highly hypnotizable individuals, one can think of them as more sensitive to an experimental situation in which pain sensitivity is being tested.

However, in a study related to the earlier one on low hypnotizability among psychiatric inpatients, the scores of those with posttraumatic stress disorders (PTSDs) were significantly higher than those of every other patient population and of the psychiatrically healthy control subjects (D. Spiegel 1988a), suggesting that high hypnotizability may carry with it a vulnerability to the development of PTSD. This finding is consistent with that of Stutman and Bliss (1985) among veterans with PTSD. The diagnosis of acute stress disorder (ASD) was added to DSM-IV (American Psychiatric Association 1994) in recognition of the fact that severe posttraumatic stress reactions may begin before the 1-month requirement for PTSD and that dissociative symptomatology in particular may be prominent in these early responses (Birmes 2001; Brewin et al. 1999; Cardena and D. Spiegel 1993; Classen et al. 1998; Freinkel et al. 1994; Koopman et al. 1994, 1996, 1997, 2001; D. Spiegel and Classen 1996; D. Spiegel et al. 1994a, 1996). The diagnostic criteria for ASD include the same A criterion as for PTSD involving a traumatic stressor entailing threat to life or physical integrity that causes intense fear, helplessness, or horror, along with three of five dissociative symptoms: numbing, being "in a daze," derealization, depersonalization, or dissociative amnesia, along with one intrusion, one avoidance, and one hyperarousal symptom (American Psychiatric Association 2000). Bryant et al. (2001) found that among 61 acutely traumatized patients, those who developed the symptoms of ASD were more hypnotizable on the Stanford Hypnotic Clinical Scale than those who did not. They were also more likely to display reversible posthypnotic amnesia, which is interesting given that spontaneous amnesia is one of the diagnostic criteria of ASD. Thus, there is evidence that high hypnotizability is associated with increased vulnerability to both ASD and PTSD. It is possible that the opportunities that high hypnotizability presents for altering perception and consciousness, although initially adaptive, may, if continued, predispose such individuals to the development of other posttraumatic symptoms over time by short-circuiting their opportunities to work through traumatic experiences and memories.

There is also evidence that those who are vulnerable to nonepileptic seizures are likely to be highly hypnotizable (Carmant et al. 1995; Fonck et al. 1990; Goldstein et al. 2000; Guberman 1982; Konikow 1983; Levine 1994; Persinger 1994; Volow 1986; Zalsman et al. 2002). Hypnosis has been used to facilitate differential diagnosis, in that a hypnotic induction may induce a pseudoseizure, and also to teach control in the course of treatment over the symptom while working through stress-related stimuli. Thus, in this and other conversion disorder cases, hypnosis may be a diathesis for the expression of stress-related symptoms (Bowman and Markand 1996; Butler et al. 1996).

Hypnotizability and Disorders of the Mid-Range Group

We now discuss the decompensated states that we have seen in association with mid-range soft and decrement profiles. These profiles consist of eye-rolls in the 2–3 range and either zero levitation and a positive control differential, which is a soft pattern, or zero control differential, which is a decrement pattern.

Sociopathies

People with sociopathic disorders are highly active. Their emphasis is on manipulation and action rather than on feeling, and their affect is commonly described as shallow, rather than overwhelming, as with bipolar disorder patients, or flat, as with schizophrenic patients. Patients with sociopathy tend to be suspicious of others and are well known for resistance to compliance with external signals. They are more inclined to busily engage in getting other people to comply with their purposes than to be at all receptive toward accepting input from others about their behavior. Their compulsive rationalizing of their feelings and behavior often serves to justify the behavior after the fact, frequently in a somewhat paranoid fashion. Many people with sociopathies have clear paranoid features; underneath their manipulative hyperactivity is a delusional, paranoid core. Action is what counts for these individuals, and they often respond best to a highly structured and disciplined therapeutic approach.

Characteristic of their position, which is near the Odyssean group, they are often described as being pseudonormal. Havens* has described the patient with sociopathy as someone who gives an interviewer the feeling that he, the patient, is more normal than the interviewer. Patients with sociopathy create an impression of normalcy that is useful to them, yet they are compelled to act in such a way as to avoid any real feelings. It is in this area that we believe many of the patients described as borderline by Grinker et al. (1968), Kernberg (1975), and others belong. We expect in borderline patients with decrement profiles such characteristics as micropsychotic episodes; the tendency to project and manipulate, to split objects in their world into good and bad categories, and to fear abandonment; shallow affect; and a strong tendency to act rather than feel. However, they may be hard to distinguish from those patients diagnosed with sociopathy or with paranoid character disorders. We thus see them as being decompensated Apollonians or Odysseans with paranoid and sociopathic features, as in the following example.

^{*}Havens, L.L., personal communication, 1970.

K.U. was a 23-year-old, separated father of three. He was seen for psychiatric evaluation after his arrest on charges of rape and murder. The crime was a particularly brutal one, and the defense argued that he had a "dual personality" and was therefore psychotic during the crime. His parents were divorced when he was an infant, and his mother's remarriage was marked by repeated separations. He completed high school, had no prior criminal record, and had worked as a laborer before his arrest.

The HIP was administered, and he scored a 2–3 soft pattern with an induction score of 5. The survey of cluster characteristics yielded mixed features. Formal psychological testing revealed the following information:

"K.U.'s test results indicate poor identity formation, characterized by marked feelings of inadequacy, inferiority, schizoid tendencies, depression, and depersonalization. Feelings of loneliness and emptiness pervade the test responses, suggesting a borderline personality disorder. If stressed too far where tolerance for ego deflation has reached an impasse, a sharp lack of impulse control may definitely reflect his (lack of) ability to cope adequately with the stress-inducing situation. His borderline structure is primarily a developmental defect, in which a fundamental deformity or inadequacy of ego-functioning prevails."

In short, K.U. was found by the court to be characterologically impaired, but not histrionic, psychotic, or legally insane. The psychological test results and the initial impression generated by the profile score were consistent with the diagnosis of a person with borderline sociopathy. Without a high-intact profile score, hysterical dissociation or so-called dual personality was unlikely. On the other hand, one would expect to see a 1 or 2 decrement profile if the subject had schizophrenia. The 2– 3 soft pattern was a statement of K.U.'s marginal psychological functioning with poor impulse control. He was not so impaired that the ribbon of concentration was entirely disrupted, but his trance capacity was hardly so profound that it could be invoked to explain the postulated dissociative episodes. The court found him to be sane and guilty.

It is our experience that the HIP has been useful in making the difficult distinction between borderline schizophrenia and primary hysteria; patients with the latter have high-intact profiles, and patients with the former often have soft or decrement profiles. This difference in the pattern of performance when hypnotizability is tested may be a reflection of a critical clinical distinction. Dissociative disorder patients may have serious loss of function, exhibit psychotic symptoms, and be quite manipulative, but the underlying conflicts are usually of a positive libidinal nature. One establishes rapport easily with them. and they tend to be, if anything, too trusting and dependent in therapy. Thus, their willingness to "go along" with the hypnotic protocol is not surprising. Patients with genuine borderline disorders, on the other hand, tend to be somewhat hostile and paranoid. Coping with hostility and negative transference is the major work in psychotherapy with them (Kernberg 1975). Thus, it is hardly surprising that as a group they tend not to allow themselves to experience sensorimotor changes characteristic of the trance state. Their underlying hostility and suspicion interfere. The implications of this distinction for appropriate psychotherapies are further discussed in Chapter 18, Spectrum of Therapies.

Impulse Disorders

Individuals with impulse disorders include those whose tendency to act rather than feel is similar to the tendency seen in patients with sociopathies, but the trait is less rigid and bound in hostility. This group includes individuals with a specific impulse problem in one but not all areas of their lives, such as some addictions or compulsive gambling. They may be more prone to soft rather than decrement profiles, are often more functional in other areas of their lives, and are less paranoid and suspicious than patients with sociopathies. It is not hard to see how a patient's paranoid stance with regard to the world would interfere with his or her ability to experience many somatic sensory alterations at the request of another person.

Reactive Depressions

Patients with reactive depressions make up a group consisting of many fundamentally intact individuals who experience a relatively severe depression in response to a life stress. For a period of time, they may become immobilized, with decreased energy, interest, and involvement with others. At such times, their profile may become soft. We have some clinical data to suggest that after recovery from the depressive episode, the intact mid-range trance capacity is reestablished in these patients. As noted earlier, members of the Odyssean group are prone to periods of depression between periods of activity. This group of patients with reactive depressions constitutes a fraction of the normal neurotic group whose depression becomes serious and immobilizing.

Passive-Aggressive Disorders

Patients with passive-aggressive disorders include individuals with characterological passive-aggressive traits, not merely those with such patterns in isolated neurotic form. Their relationships tend to be permeated with a quiet hostility, and they use their inaction in a calculated and manipulative fashion. At the same time, they often feel quite empty, lonely, and mistreated. They generally have soft or decrement profiles.

As a rule, these members of the soft and decrement group have a relatively fixed and inflexible pattern of responding, exemplified by a rigid and distorted compulsive triad (see Chapter 5, The Person With the Problem: Apollonians, Odysseans, and Dionysians). Patients with passive-aggressive disorders tend to distrust and fail to respond to new input, either ignoring or transforming it so thoroughly that it becomes virtually unrecognizable. They compulsively comply with an internally generated theme much more than to any external input; they are not open to outside direction and change. Furthermore, they are often densely unaware of the determinants of their compulsive activity; their reason serves not to illuminate but to justify their compulsive patterns of behavior. They have in common a poor hypnotic performance and are unresponsive to hypnotic signals, relative to their rather rigid adherence to their internally generated preoccupations.

Summary

The reflections included in this chapter are an attempt to assimilate a vast body of psychiatric data. The primary point is that the style of hypnotizability seems to be correlated with a large number of other

personal traits and problems: What is tapped in the trance state may broadly transform the individual's world view of him- or herself, and his or her capacity and willingness to learn and act, into a brief and measurable behavioral performance.

The association between patterns of performance on the HIP and various clusters of character style and psychiatric disorders is presented with some supporting evidence but is hardly an absolute or final picture. Rather, it is hoped that organizing the spectrum of personality styles and psychiatric disorders in this way will prove clinically useful in thinking through differential diagnosis with the help of a brief assessment of hypnotizability. We have enough data to assert that the presence of intact-high hypnotizability should arouse the clinician's index of suspicion that the patient is reasonably functional and has an intact, usable capacity to concentrate but may be vulnerable under stress to ASD and PTSD, dissociative disorders, or conversion disorders. In contrast, we have data to suggest that the presence of a soft or decrement performance on the HIP is consistent with serious psychopathology of different types, including schizophrenia and major depression. However, no such statistical association is absolute in an individual case. Such associations are best used to sharpen and refine a clinician's diagnostic impression based on standard intervention techniques, including history and mental status examination. It is hoped that the HIP will prove useful enough to be incorporated as part of the mental status examination of the patient. A patient's inability to be hypnotized can be as clinically useful as entry into a profound trance state when evaluated in the context of structured hypnotizability testing.

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CHAPTER 8 Neurophysiology of Hypnosis

Substantial progress has been made in the understanding of the neural substrate of hypnosis. Although there is still no identified "brain signature" of the hypnotic state per se, there is accumulating evidence that hypnosis involves alteration in the anterior attentional system, especially in the anterior cingulate gyrus, and that hypnotic alteration of perception results in congruent changes in brain electrical activity and blood flow in the salient sensory cortex. In this chapter, we review research on the neurophysiology of hypnosis, including electroencephalographic (EEG) research using event-related potentials (ERPs), brain imaging (positron emission tomography [PET] and functional magnetic resonance imaging [fMRI]) studies, and studies of neurotransmitter pathways.

Electroencephalographic Studies

Power Spectral Analysis

The pattern of brain electrical activity during hypnosis clearly reflects waking brain activity rather than sleep: Increased alpha activity is found among highly hypnotizable individuals irrespective of whether the subjects are formally in trance (Morgan et al. 1974a). Human alpha waves have long been regarded as a marker of a cortical resting state, whereas lower frequencies reflect somnolence. More recent EEG spectra–hypnosis research has focused on the 6-Hz theta and 40-Hz beta bands as indicators of cognitive activity. The idea that 6-Hz theta bands reflect cognition derives from animal studies in which this rhythm was seen in the hippocampus during exploratory behavior. More recent studies suggest that theta power, especially in the left

frontal region, best differentiates high- from low-hypnotizable individuals (Sabourin et al. 1990). Persistence of theta activity after hypnotic induction characterizes high-, but not low-, hypnotizable individuals (Williams and Gruzelier 2001).

The detection of a corresponding hippocampal rhythm in humans from scalp electrodes would require sophisticated signal extraction techniques, as EEG fields in enfolded structures such as the hippocampus generally cancel themselves out and do not propagate very far from their generator. The 40-Hz rhythm may be of cortical origin, but unfortunately, electromuscular activity (measured by electromyography) occupies the same bandwidth. These technical problems and limitations intrinsic to the interpretation of power spectral analyses have led to research using ERPs.

Event-Related Potentials

Cortical ERPs have been widely used to study perceptual and attentional processing. They are a measure of cortical electrical responses to a series of stimuli. This method provides excellent temporal resolution of brain response to sensory input but less precise spatial localization. The amplitudes of early components of the ERP (100-200 ms after stimuli) are thought to reflect input signal strength and type of signal (e.g., visual vs. auditory). The amplitudes of later components (200-500 ms after stimuli) have been shown to be increased by novelty, conscious awareness, and task relevance (Hillyard and Munte 1984; Ritter et al. 1984). The key hypothesis tested using ERP methodology is that if a hypnotized person reduces his or her perception of a stimulus, there should be corresponding changes in the amplitude of the ERP to that stimulus. Half of the early studies (approximately 20) could not demonstrate such an effect, but an equal number did. Problems with this early work included small sample size; the use of patient rather than nonpatient populations. often including subjects with psychiatric or neurological disease; and semiquantitative analysis of ERP amplitude. In particular, early ERP studies demonstrated the heightened capacity of highly hypnotizable individuals to focus attention by documenting contrasting crossmodality filtering effects in high- and low-hypnotizable individuals. When high-hypnotizable individuals were instructed to attend to an auditory channel while ERP was recorded from a visual channel,

they showed a reduction in amplitude of response from the unattended channel. Low-hypnotizable subjects, in the same task, demonstrated the opposite effect: an increase in ERP amplitude to the unattended channel. This finding highlights the limited ability of low-hypnotizable individuals to deploy focal, as opposed to peripheral, attention.

More recent ERP studies of the effects of hypnosis on perceptual processing have been productive. They indicate that hypnotic instructions to alter perception result in corresponding changes in the brain's response to stimuli in that modality. ERP studies indicate that alteration of perception under hypnosis changes portions of the waveform affected by inattention and meaning. In particular, according to the work of De Pascalis, Barabasz, Jasiukaitis, and also our laboratory (Barabasz and Lonsdale 1983; Barabasz et al. 1999; De Pascalis and Carboni 1997; De Pascalis et al. 1999; Jasiukaitis et al. 1996; D. Spiegel et al. 1985, 1989), a hypnotic hallucination designed to obstruct perception of visual and somatosensory stimuli results in reduction of amplitude of early (P_{100}) and late (P₃₀₀) components of the waveform response to such stimuli. Thus, the subjectively reduced perception typical of hypnotic analgesia, for example, is accompanied by reduced ERP amplitude in response to stimulation in that modality. In the visual system, this finding has been localized to the left occipital cortex (Jasiukaitis et al. 1996), which is consistent with work demonstrating imagery generation in that region (Farah et al. 1990). More recent investigation has shown that hypnotic obstruction results in reduced amplitude in components that are attention related (e.g., P_{100}) and others that are not attention related (e.g., P_{200} and P_{300}) (Barabasz et al. 1999; De Pascalis and Carboni 1997; Nordby et al. 1999).

Thus, during obstructive hallucination, hypnotic reduction of the early component of ERP response does not seem to be different from inattention (Hillyard and Munte 1984; Jasiukaitis et al. 1996). However, for P_{200} and P_{300} , directed inattention increased the amplitude, whereas hypnotic obstruction decreased it. This result means that hypnotic alteration of perception involves more than simple inattention to a stimulus. Rather, a competition is set up between internally generated imagery and perceptual processing, resulting in a reduction in the amplitude of the ERP response to the sensory input (D. Spiegel 2003a).

However, Barabasz initially observed that an obstructive hypnotic hallucination actually increased P₃₀₀ amplitude, in this case in response to olfactory stimuli (Barabasz and Lonsdale 1983). This observation was puzzling in light of our finding that hypnotic visual obstruction reduces P₃₀₀ amplitude (D. Spiegel et al. 1985), a finding that has been confirmed by De Pascalis and Carboni (1997). Barabasz used the anosmia to ammonia hypnotic instruction of the Stanford Hypnotic Susceptibility Scale, which is worded, "You can no longer smell anything at all" (Hilgard 1965). However, subjects who may have reduced their perception but not eliminated it completely might well have been surprised by the odor, and surprise increases P₃₀₀ amplitude (Baribeau-Braun et al. 1983). Barabasz accepted this interpretation (D. Spiegel and Barabasz 1988), and he went on to demonstrate, in an elegantly designed experiment, that an obstructive hallucination results in reduced ERP amplitude, whereas a negative hallucination results in increased amplitude (Barabasz et al. 1999; Jensen et al. 2001). A crucial difference in the two hypnotic instructions is the hardiness of the obstructive hallucination; the clinician must be mindful of the subject's need to break with the paradigm if it does not work completely in the case of negative hallucination. An obstruction to perception need not be complete or perfect. One might well expect to see light through a curtain or boxsuch a situation does not challenge the vividness or effectiveness of the instructed visual illusion. Thus, any degree of perceptual alteration still allows subjects to stay with the instructed positive hallucination paradigm (i.e., to focus on it rather than evaluate it or deal with competing input), thereby producing the associated and expected reduction in ERP amplitude. These studies underscore the importance of the specific wording of hypnotic instructions when studying their neurophysiological concomitants. The fact that evidence of this important principle exists will not be surprising to most clinicians experienced with hypnosis. Hypnotic instructions to reduce perception of pain, for example, affect blood flow in different parts of the brain than those affected by instructions to reduce distress caused by painful input (Hofbauer et al. 2001).

One study demonstrates that hypnosis in highly hypnotizable individuals inhibits the F wave as recorded by electromyography in the right upper extremity. Thus, hypnosis seems to inhibit motor neuron– membrane excitability, particularly on the right side (Santarcangelo et al. 2003).

Positron Emission Tomography and Functional Magnetic Resonance Imaging Studies

PET and fMRI imaging both provide measures of brain function with far greater anatomical precision than that obtainable using electrophysiological techniques. Kosslyn et al. (2000) found that hypnotically induced illusions affecting color vision resulted in bidirectional blood flow changes in the color processing cortex. Eight highly hypnotizable subjects were asked to see a color pattern in color, a similar grav-scale pattern in color, the color pattern as grav-scale, and the grav-scale pattern as grav-scale during PET scanning using ¹⁵Olabeled CO₂. The classic "color area" in the fusiform/lingual region was identified by analyzing the results when subjects were asked to perceive color as color versus when they were asked to perceive grav as gray. When these highly hypnotizable subjects were hypnotized, both the left- and right-hemisphere color areas were activated when they were asked to perceive color, whether they were actually shown the color or the gray-scale stimulus. Conversely, these brain regions showed decreased activation when the subjects were told to drain what they were looking at of color, whether they were actually shown the color or the gray-scale stimulus. These results were obtained in the left-hemisphere color region only during formal hypnosis, whereas blood-flow changes in the right hemisphere reflected instructions to perceive color versus gray irrespective of whether subjects had been formally hypnotized. The observed changes in subjective experience induced during a hypnotic state were reflected by changes in brain function similar to those that occur during perception-in this case, believing was seeing.

In a series of important studies, Hofbauer, Rainville, and colleagues examined brain components of hypnotic analgesia (Hofbauer et al. 2001; Rainville et al. 1997, 1999, 2001, 2002). In particular, they delineated differences between hypnotic effects on pain sensation itself versus the distress caused by the pain (i.e., sensation vs. suffering). In an early PET study (Rainville et al. 1997), researchers used a hypnotic intervention that sought to change distress about pain rather than perception of it; the suggestions were for increased

or decreased "unpleasantness" of the pain (p. 970). They observed differences in regional cerebral blood flow (rCBF) in the anterior cingulate but not in the primary sensory association cortex. In subsequent work, Hofbauer et al. (2001) demonstrated reduced activity in region S1 of the somatosensory cortex during hypnotic analgesia involving instructions to reduce pain intensity rather than unpleasantness. Hypnotic instruction to increase pain intensity among the 10 volunteers in the study resulted in increased activity in S1, S2, the anterior cingulate, and the insular cortex. This body of work provides further evidence that hypnotic alteration of perception results in congruent changes in primary sensory–association cortices (thereby causing a given stimulus to actually feel different to a subject) in addition to involving the anterior cingulate gyrus, which is part of the anterior attentional system.

Faymonville et al. (2003) have further elucidated brain pathways associated with hypnotic analgesia. Using PET, they found that pain reduction during hypnosis is mediated by an increase in functional connectivity between portions of the midcingulate cortex and other structures involved in pain perception, including the insula and frontal regions (especially right frontal regions) as well as the brain stem, thalamus, and basal ganglia. Their idea is that the midcingulate cortex can increase interaction among portions of the brain that mediate sensory, affective, cognitive, and behavioral aspects of pain perception.

The Neurophysiology of Attention

Hypnosis involves brain mechanisms related to arousal and attention, but it is not simply the product of them. A brief review of the neurophysiology of attention will help clarify the areas of overlap and difference between hypnotic and other kinds of attention processing. Activity in the frontal lobes and the anterior attentional system, especially the cingulate gyrus, seems to be involved in hypnotically induced sensory alteration.

Posner and colleagues (Fan et al. 2002; Posner and Peterson 1990; Raz and Shapiro 2002) delineate three components of attention: executive attention, alerting, and orienting. *Executive attention*, modeled as target detection, is described as analogous to a spotlight (i.e., focused attention) and is localized to the anterior cingulate gyrus. The second component, *alerting*, is also a characteristic of the anterior attentional system and is characterized by rapid response with an increase in error rates. This component is localized to the right medial aspect of the frontal lobe. The third and most posterior portion of the attention system, *orienting*, is localized to the anterior occipital/posterior parietal region. This area has strong connections to the superior colliculus and the thalamus. Lesions in these lower connections result in difficulty with orienting, focusing attention on a target, and avoiding distraction. There are different types of orienting: The right hemisphere is biased toward global processing, whereas the left hemisphere is involved in local processing.

There is evidence that competitive attention tasks may involve activation trade-offs in primary processing areas without any executive function activation to manage the balance (Fan et al. 2002). This evidence, combined with Rainville's findings (noted in the section Positron Emission Tomography and Functional Magnetic Resonance Imaging Studies), helps us understand that the anterior attentional system is affected during hypnotic analgesia that emphasizes the reduction of pain-associated distress: Activity in the anterior cingulate gyrus is reduced. However, when pain sensation itself is altered in hypnosis, the somatosensory cortex shows the change in brain blood flow.

Hypnotic Attention Versus Vigilance

The observed difference in ERP amplitude response between obstructive (reduced amplitude) and negative (enhanced amplitude) hallucinations (Barabasz et al. 1999; Jensen et al. 2001) is consistent with a focal-attention model involving the anterior attentional system and the anterior cingulate gyrus in particular. If a negative hallucination or injunction is contradicted by experience (e.g., "I can see some color" or "I can read a word"), vigilance is likely to be triggered. When something unexpected that tends to break with the prevailing hypnotic paradigm occurs, the posterior attentional system is likely activated, leading to noradrenergic arousal. Clinicians often structure hypnotic suggestions in ways that allow for a variety of responsiveness in both type and intensity (Crasilneck and Hall 1985; H. Spiegel and D. Spiegel 1978). It is crucial that the hypnotic state and the task performed within it reinforce, rather than contradict, each other; such reinforcement facilitates an increase in circuit redundancy or

activation rather than requiring arousal and external scanning awareness for new means of interpreting perceptions (Pribram and McGuinness 1975). Recent work by De Pascalis et al. (1999, 2001) confirms the importance of the type of hypnotic analgesia instruction. They found that focused analgesia in particular and also dissociative imagery produce more ERP changes, primarily P_{300} reduction, than does simple relaxation. They also observed higher frontotemporal N_{200} and smaller posterior parietal P_{300} amplitudes during hypnotic analgesia among highly hypnotizable subjects.

The role of the anterior attentional system in hypnotic analgesia is emphasized by the findings of Crawford et al. (1993). Using ¹³³Xe rCBF imaging, researchers studied hypnotic analgesia to ischemic pain with high- and low-hypnotizable groups. They found bilateral CBF increases in the orbitofrontal cortices of the high-hypnotizable group during hypnotic analgesia. They also found changes in the somatosensory cortex. Ischemic pain produced CBF increases in the somatosensory region. During hypnotic analgesia, high-hypnotizable persons demonstrated CBF increases in the somatosensory cortex, whereas less-hypnotizable persons showed decreases. Although one would expect changes in the somatosensory cortex under these conditions, one would have predicted decreases rather than increases during hypnotic analgesia among the high-hypnotizable group.

Responding to Words and Manipulating Images

One can think of the brain as being divided into an anterior effector portion that allows us to act on the world, and a posterior receptive portion that responds to the world (i.e., action vs. perception). Work on autobiographical memory suggests that it commences in the frontal lobes with a search strategy and works its way posterior toward activation of images in the occipital lobes. This is controlled, desired activity accompanied by a willing sense of agency. By contrast, posttraumatic stress disorder (PTSD) seems to force autobiographical memory to move from back to front, with unbidden, intrusive images that are experienced as uncontrolled and unwelcome (Horowitz et al. 1993). Brain imaging in PTSD shows hyperactivation of the hippocampus (affecting memory), amygdala (affecting emotion), and occipital cortex (affecting imagery) and hypoactivation of Broca's area (affecting speech) (Rauch and Shin 1997). Thus, deep and posterior portions of the brain are activated, whereas the effector systems, especially speech, are inhibited, adding to the sense of helplessness and involuntariness in persons with PTSD. Such individuals feel that they are being retraumatized by their memories.

There seems to be a paradox: Agency seems to be associated with efferent activity rather than passive perception. Yet, it is not uncommon that people engaged in motor performance lack self-awareness (e.g., actors, athletes, people in "flow" states) (Csikszentmihalyi 1991). Thus, agency does not uniformly accompany activity, even voluntary activity. One way to resolve this apparent paradox is to conceptualize self-awareness as a perception. Even if agency is best demonstrated by action, it may not be perceived if something is inhibiting perception (e.g., if perceptual processing is saturated with intrusive imagery or redirected through hypnotic instruction). Motion can occur in hypnosis without the perception of agency. The wellestablished ability of hypnosis to alter perception may account for its less-understood ability to alter identity, memory, and consciousness (i.e., perception of self). Perception of motor activity is complex; it involves expectation of a response to a motor act initiated. Hence, we cannot tickle ourselves. Thus, alteration of perception has great potential to alter the sense of agency in regard to our own actions.

Hypnosis involves a narrowing of the focus of attention (D. Spiegel 1998a), analogous to looking through a telephoto rather than a wide-angle lens, along with a suspension of critical judgment, with decreased emphasis on evaluation of accuracy. Hypnotic inductions frequently involve eve closure (although this is not necessary), which may well inhibit the posterior attentional center near the occipital cortex. Pathways from the thalamus to this center are clearly defined. The thalamus has been described as a possible locus for conscious awareness (Hobson 2001). If the thalamus functions in this capacity, the attentional balance may shift anteriorly, with the consequence of narrowing the focus of attention and enhancing activation. Then, mechanisms similar to dream mechanisms described by Hobson and Stickgold (1995) may occur. Internally generated images are processed as though they had been received from outside; hence the vividness of hypnotic imagery and the phenomenon of hypnotic hallucination, which can result in a reduction or increase of ERP amplitude. Indeed, hypnosis seems to involve an inversion of the usual means of processing words and images (D. Spiegel 1998b). In general, people respond to images and manipulate words, whereas in hypnosis people respond to words and manipulate images. In a trance, people accept verbal input relatively uncritically (hence hypnotic

suggestibility is possible), but they are capable of transforming images and perceptions. Much of the power of the hypnotic state involves the uncritical acceptance of the implausible (e.g., the ability to reduce or eliminate pain despite the presence of an unpleasant stimulus or the ability to imagine the unimaginable, such as age progression). In such cases, the verbal instruction to alter experience overrides cognitive processing of the likelihood that such experience is possible.

This searchlight or focusing model of hypnosis receives support from recent data indicating that hypnosis can effectively decontextualize lexical perception and eliminate the delay in reaction time seen in the classical Stroop interference paradigm (Raz et al. 2002). In this experiment, highly hypnotizable subjects were told that the words they would see while hypnotized were written in a foreign language and would have no meaning. This virtually eliminated the classical Stroop effect (i.e., the delay in reaction time caused by incongruent words and ink colors, for example, the word red written in green ink). Their finding is consistent with the finding that hypnotic instruction to have a subject focus on just a portion of a given letter reduces Stroop interference (Nordby et al. 1999) and with even earlier work by Sheehan et al. (1988). The one contradictory finding in the literature (Dixon and Laurence 1992) may be accounted for by differences in hypnotic instruction analogous to those addressed in our discussion of positive versus negative hypnotic hallucinations in the section Event-Related Potentials. The more effective hypnotic instructions for reducing Stroop interference provide a substitute perception such as "the words are in a foreign language" rather than a negative injunction such as "you cannot read the words." The difference in instructions can in fact be crucial for interpreting hypnotic effects. The bulk of these Stroop studies suggest that hypnosis can be used to alter even the automaticity of word processing. This idea may seem odd given that hypnotic performance, which is typically seen as *inducing* automaticity, in this case reduces the automaticity associated with word reading. The key feature of hypnosis may involve altering automaticity rather than simply increasing it. Hypnosis may modulate the sense of agency.

Neurotransmitters and Hypnosis

It is reasonable to assume that certain neurotransmitter systems are especially involved in hypnotic phenomena. Investigation of this assumption has proven fruitful in sleep research; Hobson and Stickgold demonstrated a shift from noradrenergic to cholinergic activity in sleep, especially REM sleep (1995). D. Spiegel and King (1992) demonstrated a robust correlation between hypnotizability and levels of homovanillic acid (HVA), a dopamine metabolite, in the cerebrospinal fluid (CSF). HVA primarily reflects dopamine turnover in the frontal lobes, which accounts for approximately 90% of the HVA in the CSF: the remainder comes from the basal ganglia. Further support for the role of the dopamine system in hypnosis is found in exciting recent data implicating catechol-O-methyltransferase (COMT), an enzyme involved in dopamine metabolism. A specific polymorphism in the COMT gene causes individuals to be homozygous for methionine or valine or heterozygous for methionine and valine. Persons with homozygosity for valine have increased COMT activity and, therefore, lower dopamine levels in the frontal lobes, whereas persons homozygous for methionine have higher dopamine levels. Lichtenberg et al. (2000) reported that subjects with the methionine/valine genotype have higher hypnotizability scores on the Stanford Hypnotic Susceptibility Scale Form C than subjects with the homozygous genotype. There was also a trend for the methionine-homozygous individuals to have higher hypnotizability scores. Thus, the genetic loading favors higher hypnotizability among those with higher dopamine function, but the heterozygous subjects may have some advantage in more flexible regulation of the dopamine system.

These recent findings are consistent with earlier theories. Pribram's theory implicates dopamine in activation (Pribram and McGuinness 1975), which increases circuit redundancy and focusing, versus arousal, which decreases circuit redundancy, deploys attention more broadly, and is noradrenergic. Based on the Posner model of attention, the anterior attentional system involves activation and focusing and is localized to the anterior cingulate and right frontal cortex. These areas are rich in dopaminergic neurons.

The idea that we wish to emphasize is that hypnosis is activation without vigilance, a form of alertness or consciousness but with less sympathetic activation. Posner and Peterson (1990) postulate that activation of norepinephrine works through this posterior attentional system. The anterior attentional system, the alerting component, increases the speed of response selection but allows for a lower quality of information (Fan et al. 2002); therefore, information is processed with a reduction in vigilance or critique.

We could think of ordinary awareness as a state in which social input forces an individual to increase orientation to stressors, compelling him or her into a noradrenergic mode of interaction, and heightening stress and its related health consequences. By contrast, a supportive hypnotic interaction is one that allows a person to decrease vigilance and shift into a mode of activation and control of internally generated images: a more dopaminergic and/or cholinergic mode. Thus, the idea is that selective activation of the anterior attentional system is consistent with the concept of alerting without vigilance and with a relative suppression of noradrenergic input and perhaps, therefore, output. Our recent observation of a correlation between hypnotizability and HVA levels in CSF further implicates specific involvement of the frontal lobes, where the majority of dopaminergic pathways exist, as well as the basal ganglia. Indeed, the anterior cingulate gyrus is also rich in dopaminergic neurons (Williams and Goldman-Rakic 1998).

Thus, there is evidence that hypnosis involves mechanisms related to arousal and attention but is not simply the product of them, as it uniquely modulates perceptual response.

Psychopharmacology and Hypnosis

Another approach to understanding brain mechanisms of hypnotic trance involves the use of psychopharmacologic agents that agonize or antagonize specific neurotransmitter systems. Early studies showed that amphetamines and LSD, which stimulate dopamine release, enhance hypnotic responsiveness. However, the interpretation of these findings is constrained by the fact that these drugs also affect the norepinephrine and serotonin systems. More recently, in our laboratory we have shown a significant positive correlation between measured hypnotizability and levels of activity of the dopamine system (D. Spiegel and King 1992). A major limitation to progress in this domain is the absence of a suitable animal model in which more probing studies could be performed.

Studies of benzodiazepines, which stimulate the gamma-aminobutyric acid (GABA)–ergic system, have demonstrated that these agents increase hypnotizability in highly anxious individuals and decrease it in individuals with little anxiety (D. Spiegel 1980). This finding may be attributed to the fact that anxiety interferes with concentration. Indeed, we have found that patients with generalized anxiety disorder are extremely low in measured hypnotizability. Thus, reducing anxiety would enhance hypnotic ability. On the other hand, less-anxious individuals are often sedated by benzodiazepines, which worsens their performance. Because GABAergic neurons are inhibitory, it is likely that underactivation or overactivation of the GABAergic system could inhibit hypnotic performance.

Another neurotransmitter system that was studied with great initial enthusiasm is the endorphin system. Because hypnotic analgesia is so effective, it made sense that such analgesia might be mediated by activation of the endogenous opiate system, and several early studies indicated that naloxone blockade of opiate receptors resulted in reductions in hypnotic analgesia. However, several carefully conducted, double-blind laboratory and clinical studies have provided convincing evidence that opiate receptor blockade with naloxone does not produce decrements in hypnotic analgesia, a finding that suggests that endogenous opiates are not involved (Frid and Singer 1979; Goldstein and Hilgard 1975; D. Spiegel and Albert 1983). Because most opiate receptors are in the spinal cord and the periaqueductal gray matter, a lack of involvement of endogenous opiates suggests that hypnotic analgesia involves attentional processing at other brain stem centers and higher cortical areas, such as the anterior cingulate and somatosensory cortex.

Deeper Brain Structures: Brain Stem and Thalamus

Although our discussion has focused on the possible role of higher cortical regions in hypnotic attention and sensory information gating, some discussion of deeper brain structures is warranted. Maclean (1977) postulated the "triune brain" with "three quite different mentalities," two of which lack the power of speech. In hierarchical terms, he identified a reptilian complex, a paleomammalian (limbic system) complex, and a neomammalian complex. He further postulated corresponding forms of mentation: protomentation (i.e., drives and impulses), emotomentation (i.e., "cerebral processes

underlying what are popularly recognized as emotions"), and ratiomentation. He speculated that three corresponding patterns of time and space awareness exist. In a metaphorical sense, "The reptilian brain provides the basic plots and actions; the limbic brain influences emotionally the developments of the plots; while the neomammalian brain has the capacity to expound the plots and emotions in as many ways as there are authors" (p. 124). As hypnosis affects affective and somatic dimensions of experience, it makes sense that deeper brain structures may be involved in hypnotic experience. Hobson (2001) has speculated that if the brain has a "seat of consciousness," that seat would be the thalamus. Thalamic infarcts are certainly associated with profound loss of consciousness. Recent work has shown that during hypnosis activation in the medial cingulate is associated with that in the thalamus (Hofbauer et al. 2001; Rainville et al. 2001, 2002). Thus, hypnosis seems to involve top-down processes as well, affecting structures involved in the primary experience of sensation, affect, and consciousness.

These subcortical systems may also involve structures known to affect arousal, such as the reticular activating system (RAS) in the brain stem. This involvement might explain the connection between eve movement and changes in states of consciousness. Sleep involves closing the eyes; dreaming entails rapid eye movements. The motor nuclei for control of the extraocular muscles are located in the brain stem, as is the motor nucleus that is involved in control of the levator palpebrae. Although certain integrative motor neurons for eye movement are located in the motor cortex, there is a great deal of subcortical integration of eve movement. In particular, the medial longitudinal fasciculus, which receives contributions from the vestibular subsystem and from the RAS, plays an important role. In addition, the superior colliculi appear to integrate eye movements subcortically and receive significant reticular afferents. Clearly, as effectively as the up-gaze and eve-roll movements can be conceptualized by third-order neurons in the cortex, the functional capacity cannot exceed that permitted by reticular integration in the brain stem. In other words, Greenberg (1978) has postulated that the complex movements of up-gaze and eve-roll have a final common integrative component within the midbrain reticulum acting on the oculomotor nuclei. This integrative factor may reflect a general capacity of the reticular system for flexibility and may also account for a biological basis for limbic-thalamic integration. Reticular flexibility means the capacity of the RAS to shift focal attention sharply onto

one or two areas and to do so rapidly. This common integrative component also may reflect the capacity for rapid integration of externally suggested movements by means of flexible reticular function. Once the concept of levitation has gained entry into the midtemporal, and perhaps parietal, cortex, its rapid transfer to the effector neuron complex may hinge on reticular activation, which fosters such transfers. The dependence of levitation on reticular activation would imply that up-gaze, eye-roll, and initial arm levitation, all motor functions, depend to varying degrees on a rapidly adaptable reticular system. This is a plausible, internally consistent, but unproved hypothesis.

Thus, ideation, emotion, and sensation, led through appropriate cortical, limbic, and thalamic pathways, may be facilitated or inhibited by virtue of the reticular system's focusing on particular functions. The RAS then can permit integration of ideation, emotion, and sensation so that a new ideational complex is immediately available to the posterior temporal and parietal areas as well as the conceptual motor areas. This mechanism may also be involved in hypnotic amnesia, when it occurs, and in posthypnotic suggestion. Thus, the biological basis of trance capability may depend on an integrating function of the RAS, whereby thalamic and limbic impulses are integrated with left- and right-sided cortical components. Greenberg's theory regarding the role of the RAS and limbic system in focal attention is roughly consistent with Pribram's description of limbic involvement in redundancy enhancement. According to both theories, focal attention is facilitated by the withdrawal of competing input.

Summary

We know that hypnosis involves the anterior attentional system, specifically the anterior cingulate gyrus. Hypnosis also seems to mobilize an exceptional ability to alter perceptual processing, either increasing or decreasing response to stimuli, depending on the content of the hypnotic instruction. Hypnosis may also selectively involve frontal lobe functions that are considered to be executive and inhibitory in their role in behavior. Although evidence for a frontal lobe role in hypnotic performance is mixed at best (Kallio et al. 2001), the dopamine system is clearly implicated. These brain mechanisms are also

likely to involve deeper structures—for example, the RAS in the brain stem and the thalamus. We hope that further functional brainimaging studies will allow researchers to define better the neurophysiology of attentional processes; then we will be better able to identify brain correlates of hypnotic phenomena and localize the brain centers most involved during hypnotic trance. Hypnosis seems to involve activation rather than arousal, allowing subjects to manipulate perceptions and alter sensory processing while responding with relative automaticity to words. This brain-mediated shift in the sense of agency is indeed self-altering, and it provides tremendous therapeutic potential in the management of pain, stress, and anxiety.

Enough is now known about the neurophysiology of hypnosis that the phenomenon is being used as a tool for the exploration of the neural basis of cognitive function (Raz and Shapiro 2002). Thus, although there is still no certain neurophysiological "signature" of the hypnotic state, there is ample evidence of effects of hypnosis on the brain's sensory and cognitive function. This evidence can, in turn, be used as a tool to explore more general cognitive and sensory processing problems in the brain and to help us refine the therapeutic applications of hypnosis as well.

PART III USING HYPNOSIS IN TREATMENT
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Principles

CHAPTER 9 Formulating the Problem

There is nothing permanent except change.

Heraclitus

Hypnosis and therapy, similar to man and woman, are different but related in interesting ways. Hypnosis is not in and of itself therapy, but it has great potential to facilitate a variety of therapeutic strategies. Simply entering the hypnotic state may induce relaxation, relieve stress, and focus attention. Yet there is no "hypnotherapy." Rather, hypnosis is best understood as a state of consciousness and concentration that can facilitate a primary treatment approach. Hypnosis is part of the process more than the content of therapy.

In understanding the relative role of hypnosis in therapy, it is useful to establish a spectrum of all the psychiatric therapies as a background (Figure 9–1). The intact zones from 1 to 5 on the Hypnotic Induction Profile (HIP) are the target areas in which hypnosis has its most direct applicability. As indicated in the diagram, there are a variety of therapeutic modalities already in use that can be beneficial with Apollonian, Odyssean, and Dionysian personality types. The major role of hypnosis in established treatment modalities is to facilitate the primary treatment strategy. In essence, hypnosis can contribute an extra leverage effect that adds to the impact of a given therapy and often leads to shortening that procedure. As we mentioned in the introduction to Chapter 5, The Person With the Problem: Apollonians, Odysseans, and Dionysians, three critical questions need to be answered to formulate the best treatment approach:

PREFERRED TREATMENT MODES



- 1. What is the problem?
- 2. Who is the person with the problem?
- 3. What is the best strategy to use to help that kind of person deal with that type of problem?

Although many therapists choose a treatment modality by intuitive judgment, logistical preference, or ideological bias, our approach suggests that there is a systematic way to determine which of these various modalities is most appropriate for a person with a given problem.

We present one approach to brief, symptom-oriented treatment, called *restructuring*, which uses hypnosis and is designed to be maximally adaptable for all individuals within the intact range of hypnotizability. By virtue of being brief, it is designed to be taught to a patient in one session and involves a mixture of cognitive and emotional components. Restructuring serves as a first step in the treatment process—as a kind of therapeutic trial. If it works and the symptom is alleviated, the patient may go on to symptom mastery in other areas or may simply be satisfied with the result. If restructuring is unsuccessful or if the patient's curiosity is aroused regarding further explanation of his or her symptoms, we seek to use the information gathered from the HIP and the rest of the clinical data to systematically select an appropriate intensive treatment strategy.

The structure of the remainder of the book reflects this restructuring treatment approach. After presenting our approach to the use of hypnosis in symptom-oriented treatment, we discuss the uses of hypnosis in selecting an appropriate intensive psychotherapy and in treating the highly hypnotizable patient. In the section Time for Psychotherapy: A Brief for Brief Treatment, we present in some detail our theoretical approach to the use of hypnosis in brief psychotherapy. We arrive at the selection of a treatment strategy after reviewing hypnotizability assessment and its implications for a given patient's personality structure and relative state of mental health. This parallels the clinical encounter in which a history is taken, the patient's hypnotizability is assessed and discussed with him or her, and the therapist is then prepared to recommend a treatment approach and teach the patient how to use it.

What follows is a distillate of our approach to incorporating hypnosis into psychotherapy. We have endeavored to present the approach in some detail, both from a theoretical perspective and through enumerating treatment strategies. We hope the reader can evaluate and use this material in the context of his or her own interests. We present it

not as the only approach available, but as one that we have found to be theoretically and clinically appropriate, efficient, and effective. This chapter is not intended to be a comprehensive review of the variety of reported uses of hypnosis in psychotherapy. Such a review has been done well in other texts, to which the reader is referred (Crasilneck and Hall 1985; Erickson 1967; Erickson et al. 1976; Frankel 1976; Hilgard and Hilgard 1975; Maldonado and D. Spiegel 2000; Meares 1960; Weitzenhoffer 1957; Wolberg 1948).

Temporal Context of Treatment

Before we proceed to a discussion of brief treatment strategies, it is worthwhile to discuss the importance of time in relation to psychotherapy. As noted in Chapter 5, The Person With the Problem: Apollonians, Odysseans, and Dionysians, individuals can have quite different views of time. Apollonians tend to concern themselves with past and future, Dionysians tend to live for the moment, Odysseans tend to shift between present and past or future considerations, and patients with schizophrenia tend to live in a timeless world of primary process. Likewise, different psychotherapies have within them different, implicit views of the passage of time, and they convey varying messages to patients about the value of time.

One can look productively at the kinds of human behavior that psychotherapists normally consider in terms of one factor: time. It can be argued that many psychological symptoms are ways of dealing with the passage of time: that the symptoms are ways of creating the illusion that time does not pass, that it is not moving at all, that it is circular, or that it can be stopped at will, an unconscious means of managing existential anxiety (Yalom 1980).

Numerous philosophers have concerned themselves with the phenomenon of time. At least as far back as Aristotle, there has been a trend of describing time in spatial terms, arguing that time can be adequately measured by the movement of an object at a fixed rate of speed along equal distances. Aristotle (1961) essentially attempted to lay a strip of time on the ground and measure it by spatial standards. The idea that time could be measured in spatial terms was crucial for the development of scientific thought. After all, the very notion that experiments can be reproduced requires a capacity to hold certain circumstances constant. To quantify and replicate results, it is necessary to be able to assume that one 5-minute period is essentially the same as any other. The clock is the perfect symbol of the translation of time into spatial terms. Temporal motion is translated into uniform circular motion, providing a uniform and reproducible representation of time.

However, this spatial representation of time has certain limitations. It cannot capture what is truly unique about time in relation to space—its irreversibility. Clocks do not generally run backward, but they can; in any event, by running forward they wind up in the same place. Movement in time, as distinct from movement in space, is unidirectional and irreversible. No spatial metaphor can capture this because any object can theoretically move in any direction in space. The directional nature of time seems to take on relatively little significance in the physical universe: molecules join and separate, atoms split and fuse, tides come in and go out. These events occur in time but in any reasonable sense are quite reversible. It is possible that in astronomical thinking there is a place for time, in terms of speculating about the formation of the universe and the stars, novae, and solar systems. These events may indeed be irreversible. But in our palpable physical universe, events seem reversible.

Events are not reversible, however, when living matter is involved. Historical terms, such as evolution, are used to describe the irreversible progression of living things over time. Primitive, single-celled organisms seem to divide and reproduce endlessly, although there is research indicating that cells cannot reproduce indefinitely (Betts and King 2001; Folkman 2003; Hayflick 1965; Heininger 2002; Martin et al. 1970; Vaskivuo and Tapanainen 2003). As the complexity of life grows, so does its fragility and the concept of irreversible change and development.

This concept of irreversible change is particularly clear for members of *Homo sapiens*, who in varying ways are aware of the relentless passage of time. Each life, once extinguished, is *gone*. No human has endless time, and each passing moment of "now" enters history. We change ceaselessly as we grow, becoming what we are and evaluating what we would like to be. Folk wisdom is full of such phrases as "you can't go home again" and "no use crying over spilt milk" to make it clear that time is irreversible.

Phenomenological and existential thinkers of the nineteenth and twentieth centuries paid special attention to this phenomenon, focusing on individual perception of life and time. Merleau-Ponty (1962),

the French phenomenologist, prefers to reverse the Aristotelian error and alter space to fit a temporal metaphor. He discusses traveling from home to work, suggesting that when a new obstacle arises or the traffic is worse, the trip takes longer so the goal is actually farther away. Thus, he measures space by the time required to complete a specific activity.

Bergson (1960) pursued these speculations farther. He focused on the irreversible nature of time as opposed to space and linked these ideas to the primacy of human experience. The passage of time in human life is both exciting and anxiety provoking. Each moment is new and provides an opportunity for change and growth. Each moment, however, also provides an opportunity for disaster and death. Each day that we survive brings us closer to the inevitable end of our lives. Thus, we face the passage of time with ambivalence at best. The psychoanalytic tradition is rich with descriptions of a sense of "timelessness" in young children; the unconscious, especially as exemplified in dreams; and psychoses:

The processes of the system *Ucs.* are *timeless*; i.e., they are not ordered temporally, are not altered by the passage of time; they have no reference to time at all. Reference to time is bound up, once again, with the work of the system *Cs.* (Freud 1963, p. 187)

There may be an essential interplay between the unconscious presumption that time does not move on and the perpetuation of psychological symptoms. The very preservation of the symptom carries with it an implication of indifference about the passage of time. The rigidity of a dysfunctional pattern of keeping other people at a distance, for example, presupposes that other people will always be available to be fended off. The transference in therapy can blossom only if the transference object, the therapist, is available for projection.

The person with histrionic symptoms can throw him- or herself into a series of intense but unfulfilling relationships as though past and future never existed. The obsessional patient destroys any sense of spontaneity by forcing interactions into a constricted pattern of obsessions and rituals. The patient with schizophrenia copes with his or her overwhelming anxiety by forcing events into a rigid and autistic pattern of thinking. In various ways, all of these psychopathological patterns presume that somehow time can be stopped. An illusion is created that the same pattern of behavior can go on indefinitely, that in this way time repeats itself, and therefore one is above the limits of time. It understandably reduces anxiety to convince oneself that time can be transcended because it makes the problem of mortality appear more academic than real.*

Thus, there seems to be a close relationship between an individual's implicit sense of the passage of time and his or her psychopathological state. Denying the passage of time can be viewed as a defense against the anxiety aroused by the forward rush of time. Many defenses—isolation, displacement, avoidance, denial, and projection, for example—can be seen as attempts to avoid and yet master the movement of time; to act as though time were really like a clock and one could start over, be young again, and avoid the significance of the moment. These defenses deprive a situation of its novelty, making it seem familiar even when it is not entirely familiar. Growth occurs as individuals learn to seize each moment and make the most of it rather than expending psychological energy in denying the importance of time and its fleeting quality.

Time for Psychotherapy: A Brief for Brief Treatment

When the major emphasis in therapy is on rapid and brief treatment, often in one session, an approach is needed that necessarily demands quick and accurate problem assessment and commitment to change on the part of the therapist and the patient. It demands an atmosphere not of leisurely exploration but of urgency, a commitment to getting on with living, and a focus on the clear assessment of results. For such an approach to be successful, the patient must view his or her time with the therapist as an opportunity for growth and change: The individual must value his or her time and the therapist's time. Although an effort toward rapid intervention is desirable but not mandatory in most instances, effective therapeutic momentum is critical to prevent or treat the early phases of acute stress disorder (Classen et al. 1998; Kardiner and H. Spiegel 1947; D. Spiegel and Classen 1996; D. Spiegel et al. 1994a).

^{*}The authors are indebted to Professor Irvin Yalom for raising this issue.

Implications for Psychotherapy

The preceding speculations regarding the passage of time lead us to ponder the temporal structure of psychotherapy and how it is related to the temporal anxiety of patients. Lévi-Strauss (1969), in discussing myth and music, referred to them as "instruments for the obliteration of time." He might just as well have been alluding to certain aspects of psychotherapy. The length of treatment may unwittingly undermine therapeutic momentum. As measured by the hard stick of temporality, a good therapeutic intervention involves making it clear that the time spent in therapy is precious: If time is wasted with avoidance, denial, and even transference development during treatment, an opportunity for real contact and exchange is lost. Such defenses presume that the other object (the therapist) will always be around to be warded off, and a reminder that such is not the case may encourage the patient to explore and master the parts of him- or herself that are preventing the optimum use of therapy.

In addition to restructuring, numerous other symptom-oriented treatment approaches exist, including behavior modification, bio-feedback, and psychopharmacology. How they differ from our restructuring approach is discussed in Chapter 10, Restructuring. It suffices to say here that the HIP is crucial to the restructuring treatment approach, allowing for the maximum use of a patient's existing trance capacity and possibly indicating that another brief or even intensive treatment is in order. The HIP should also indicate those patients who are capable of very rapid change.

Two questions should be investigated when a patient presents to a psychotherapist with a symptom: 1) Why did the symptom arise? and 2) Why does the symptom continue? Insight-oriented therapists tend to focus on the former question; however, the latter question is in many ways far more important. A symptom exacts a toll on the patient and the patient's friends, family, and colleagues every moment that it continues. The secondary loss generated by a symptom, in terms of anxiety and humiliation, may well serve to cement its existence in the patient's life. For example, mild performance anxiety may initially lead to a series of personal and vocational humiliations that destroy future opportunities and reinforce the patient's anxiety. Thus, a therapeutic technique that emphasizes symptom removal as quickly as possible and in a realistic fashion recognizes the toll a symptom can exact in a patient's life and respects the relentless passage of time. Some patients may not respond to the brief intervention offered by our restructuring approach, which should be clearly determined by the HIP, and they may want to go on to an alternative brief or more intensive treatment option. The restructuring approach emphasizes making a disciplined effort at rapid symptom mastery, first by assessing those who are presumably capable of it with the HIP, and then by teaching them how to better mobilize their own resources. Time is not on our side: We must try to master it or it will master us.

Clinical Challenge

Given the importance of providing an optimal therapeutic strategy in a minimal amount of time, the therapist is confronted with no small challenge. Patients present a variety of symptoms that are at times clearly described and other times vague. A given complaint may be only the "tip of the iceberg," an evasion, or may represent a wellconsidered and thorough presentation of the problem. The therapist elicits a welter of information regarding the patient's psychological state, biological capacities, and social setting. The crucial issue is to sift among this material and select the most relevant problem or problems to be dealt with at that time.

Effective clinical work requires an attitude that can be described as a *soft focus*: a synthesis of disciplined investigation and a kind of intuitive sense. We make no pretense that there is an ultimate truth that the therapist and patient will stumble on and use. Rather, the hope is that they will quickly collaborate on finding a relevant and plausible problem in the wealth of data provided by the patient. What was once regarded as an ability to discover "the truth" is now regarded as an interaction between the patient and the therapist whereby a hermeneutic narrative is developed to help the patient move forward (H. Spiegel et al. 2000).

The HIP can provide a systematic starting point in the organization of the data presented by the patient. It provides some information regarding the patient's relative state of mental health and about his or her personality style. The relationship between patterns of performance on the HIP and these factors is discussed in detail in Chapter 4, Administration and Scoring. The data provided by the HIP constitute a starting point—a baseline for organizing further clinical data in a disciplined fashion.

In formulating the problem, it is also necessary to gather data about a patient's psychological motivation and capacity, biological

abilities, and social environment. This information can be organized in such a way that it helps to define both the problem and the patient's resources for meeting that problem. Some of the information may serve to modify or invalidate the initial hypotheses yielded by the profile measurement. It is hoped that the profile information will be used as a disciplined but not rigid means of focusing the inquiry.

Weldon Model

How do we go about formulating a problem? There are many approaches, but we have been impressed by a model developed by Weldon (1945), who postulated three major kinds of dilemmas: a difficulty, a puzzle, and a problem. A difficulty is a simple inconvenience that does not require too much discernment or diagnostic appraisal to identify. The aim in approaching it is self-evident—to remove the difficulty as an obstacle. For example, if one wants to go from point A to point B and a chair is in the way, it is self-evident that to avoid hitting the chair one either walks around it or moves it. The dilemma posed by that chair is a "difficulty."

A puzzle is a game with a known set of rules. It is clear to the person challenged by the puzzle that it is possible, with appropriate ingenuity, to solve the challenge by following the set of rules. The patient may not solve the puzzle, but it is possible to do so.

A problem is an ambiguous dilemma on which we impose a puzzle form to provide a sense of clarity. In the complexity of the human condition, it is literally impossible to identify all of the problems that relate to a person's existence. However, in this complex maze it is often clinically possible to select a sampling and apply to that aspect of the maze a puzzle form. By identifying appropriate rules of conduct to solve this puzzle, it is hoped that one can influence other aspects of the person's condition. In other words, mastering the rules of the puzzle in relation to one "sample" problem theoretically allows the patient to apply the rules to other problems in his or her life.

As the following example illustrates, one of the most frustrating and challenging areas in medicine is dealing with terminal illness.

Some years ago, Dr. Jesseph* was serving as a research surgeon at the Brookhaven Laboratories Hospital on Long Is-

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land, New York. He was developing new radiation therapy techniques for cancer. His ward contained 25 women, all dying of metastatic breast cancer. They knew they were terminally ill, which was one of the conditions for being accepted on this research ward. The patients were told that no matter what happened there was always something the staff could do.

One morning, the doctor noticed that he was drinking his fifth cup of coffee while reading the New York Times. He startled himself by wondering, "Why am I drinking so much coffee? I don't even like coffee." He then experienced a "moment of truth" during which he frankly acknowledged to himself how difficult it was to leave the dining room, go into the ward, and face those 25 dying women. At the time, the research program was not doing well, the results were not promising, and he was discouraged by the progress of the study. He happened to remember reading about the possibility that hypnosis could be used effectively in pain control, and he found an announcement of a course in hypnosis that was being offered at Columbia University by H.S. He signed up for the course and managed to travel 100 miles back and forth for seven Saturdays to learn about hypnosis. After the fifth session, he had learned enough about pain control with hypnosis to be able to induce trances in all his patients on the ward, and he taught them how to alter their perception of pain. By the end of the course 2 weeks later, he reported that 1) with the daily use of hypnosis for pain control, the patients were able to reduce their analgesic drug use to one-third of the previous level; 2) reports of nightmares were reduced by 90% after the introduction of self-hypnosis; and 3) not the least important, the doctor himself returned to having only one cup of coffee at breakfast. He observed that despite the difficulties he and his co-workers were having with their radiation research, he did have the sense of re-establishing himself as a physician who at least brought comfort to his patients by offering them an opportunity to develop a sense of mastery during this stressful period.

Several months later, we were invited to the hospital to visit the ward, which had a strangely serene atmosphere. We observed four women sitting at a table playing bridge and at the same time using self-hypnosis to contain their pain. Sitting in the corner in a rocking chair and knitting was a mother superior, also a patient, who said, "When the doctor introduced this use of hypnosis to all of us on the ward, it made such an impressive change in our feelings about ourselves that I have put myself in a dilemma I never expected. Sometimes in my prayers I am tempted to thank Dr. Jesseph before I thank God."

Another way of stating the Weldon postulate is that, by applying the puzzle form to a problem, we are recasting the problem into a workable form. This brings to mind the Reinhold Niebuhr prayer that asks God to "Give me the courage to change that which can be changed, the strength to accept that which cannot be changed, and the wisdom to tell one from the other." The Weldon formula offers an art form in which we, as clinicians, learn to ask the appropriate question, which in turn enables us to discover effective models for dealing with that particular question. Above all, it enables us to approach a problem without the temptation of becoming dogmatic. Ortega y Gasset (1957) wrote, "Whoever aspires to understand man, must throw overboard all immobile concepts and learn to think in ever-shifting terms" (p. 168). However, the choice of puzzle is not arbitrary. One must be sure that it relates to the problem so it does not become irrelevant, as illustrated in the following example.

During World War II, I (H.S.) met a battalion surgeon standing alongside a jeep that was rigged up with ingenious equipment enabling him to carry three litter cases and simultaneously administer plasma. I was so impressed by the unusual design that I immediately made notes of the equipment and asked the surgeon where I could manage to appropriate the material for it. As we were talking, I realized that he seemed to be alone with his driver and interrupted to ask where his battalion was. The function of a battalion surgeon is to be physically with the men to offer immediate medical care and evacuation if necessary. He pointed due east and said, "I estimate they are about a mile up there." This immediately dampened my enthusiasm for the ingenious jeep. It brought into focus the distinction between technology and appropriate treatment. This surgeon had become so involved in developing his technology that in the process he removed himself from the battle scene and in effect deprived his men of appropriate emergency treatment where they most needed it. He had applied an inappropriate puzzle to the problem at hand.

The clinical task is to apply the Weldon principle to therapy by systematically scanning the external and internal problems and resources, combining this information with the results of the HIP, and then estimating which aspect of this array of problems invites the application of a useful puzzle form.

History and Examination

The usual patient history information (age, sex, marital status, place of birth, referral source, formal education, work history and current employment, previous illnesses and psychiatric therapy, hospitalizations, current medication, and previous experiences with hypnosis) is gathered in the restructuring approach. In addition, having the patient discuss the history of the condition that has prompted him or her to seek help is an important opportunity for discovering the cause of the current problem. If the presenting complaint is a circumscribed statement in itself, further history is generally not helpful. However, if the complaint is diffuse, vague, or ambiguous, or covers many facets of the person's life, then further investigation is necessary to look for one definable and, it is hoped, representative aspect of the total complaint that can be approached for psychotherapeutic intervention. The long-term expectation is that if a circumscribed problem is approached and the person can learn to master this one area, a ripple effect will extend to the other difficult areas in the person's life.

As part of the general psychiatric evaluation, it is assumed that issues such as constitutional endowment, physical condition, age, sex, economic condition, treatment time available for the patient and the doctor, situational setting of the treatment atmosphere, and the therapist's willingness and ability to provide the appropriate therapy for the patient are all taken into consideration. Our focus here is on dealing with specific judgments in relation to the HIP.

While taking the patient's history, the clinician concurrently conducts a mental status examination. The presenting symptom is often not the most important reason for the patient's visit. Developing a sense of perspective is part of learning to perform the clinical evaluation. Even if the therapist perceives the complaint simply as a camouflage for an underlying problem, it is possible that dealing with it as a symbolic or metaphorical statement can have a therapeutic effect. At other times, it may be necessary to break through the camouflage and have an open confrontation about the critical issue in the therapeutic encounter. Sometimes someone in a decompensating depression who presents for treatment is in some way looking for another failure experience. If so, the appropriate focus of treatment is the underlying depression.

Even if it seems that a much longer history is relevant, or that a long-term, introspective investigation over many sessions is obviously necessary to clarify issues, it is useful to suspend this further history and investigation and to examine the patient using the HIP. At this point, the cluster questions are presented, which usually takes 3–5 minutes (see Chapter 4, Administration and Scoring). Next, the formal HIP is performed, which takes another 5–10 minutes. The combination of the brief history, the presenting symptom, the hand clasp (see Chapter 4, Administration and Scoring), the cluster data, and the HIP establishes a setting in which further exploration can be conducted or treatment procedures begun.

External Considerations

Environmental Factors

It is important to assay relevant social factors that may have been important precipitants in creating a symptom or in creating sufficient pressure on the patient to cause him or her to seek help for the symptom. For example, the death of a relative with lung cancer may result in a sufficient crisis in a smoker that he or she seeks help to stop the habit. A patient may find that a previously manageable phobia is creating a serious obstacle to the development of his or her career. For example, a plane phobia may prevent a young executive from going on necessary business trips; one patient presented with acute stress after receiving a promotion that necessitated traveling by plane.

It is helpful to take account of the patient's educational, vocational, social, and family status, as this information can help to define the problem more precisely or give some indication of the patient's momentum for change. At other times, the social and family data can provide a means for effecting change.* The therapist may be able to alleviate stress in the patient's environment. In closed social systems, such as in the army or other institutions, the authority vested in a physician can be used to bring about relief. However, in an open democratic society, this particular leverage is not easily available. Inviting family involvement can be an important part of the treatment atmosphere. For example, in the case presented in Chapter 7, Hypnotizability and Severe Psychopathology, as an example of atypical (hysterical) psychosis, one of the major therapeutic interventions simply involved negotiating with the familv for the patient to have his own bedroom and be removed physically from a situation that would inspire overwhelming anxiety in almost anyone-sharing a bedroom with a sexually active sister. The following is another example.

A young medical student who proved to be a HIP grade 5 presented himself as having anxiety, insomnia, difficulty concentrating, and disrupted social relations. In a compliant way characteristic of grade 5 persons, he had accepted his father's premise that the only way to be a man was to financially support himself, even during medical school, where he was a good senior student. His father was financially comfortable and had never had any reason to suspect his son of exploiting his financial resources. The patient held several outside jobs in addition to pursuing his studies and had become increasingly isolated because of the pressure of studies and work. The primary intervention in this case was a phone call to the father asking him to rethink his position about his son needing to be financially independent while still in medical school, rather than a few years later, when the son would be earning his own income as a house officer. His father provided him with more money; the anxiety, insomnia, and difficulty in concentrating disappeared; and the patient was able to lead a life more typical of a medical student.

^{*}For a discussion of the significance of the external environment in considerations of social intervention, see Leichter and Mitchell 1967, 1977.

It is unusual that one can make such a simple and effective intervention in a patient's social support system. Nonetheless, family and friends often provide additional leverage in defining the problem and effecting change.

Secondary Gain and Secondary Loss

The treatment atmosphere provides an excellent situation for the patient to reorder his or her understanding of the power or impact of his or her symptoms in terms of secondary gain and secondary loss. Secondary gain is especially apparent in demoralized life situations. It is an unconscious attempt on the part of the subject to use the perpetuation of the disabling symptoms as a means of extracting more and more benefit from the disability. An insidious concomitant is the emergence of secondary loss, which is at first so subtle that usually no one is aware of it. It involves a potential loss in self-respect and the transition from being an active person, no matter how imperfect, to being an invalid. Unless this subtle emergence of the loss of selfrespect is identified early, it can become institutionalized in the treatment atmosphere. Months or even years may go by before the person recognizes the severity of the secondary loss.

J.H. was a 39-year-old woman had been married for 11 years and was living comfortably in a Midwestern town. She presented with symptoms of dog phobia, which had been present since childhood. As a child, adolescent, and young woman, she received secondary gain from her phobia in the form of attention and supportive care. During her courtship with her husband, he regarded her phobia as a sign of feminine cuteness and welcomed the opportunity to protect her when necessary. But as his successful business interests developed and as she got older, her phobia became more and more of a nuisance to him and his friends. At times he mentioned this, but it in no way affected the symptom.

On one special evening, J.H.'s husband was entertaining some important business clients at an elegant restaurant and someone walked into the restaurant holding a white poodle. At the sight of the dog, J.H. suddenly jumped up from her seat, turned over the table, and spilled wine and food on the gowns and evening dress of her husband's guests. At this point, her husband became enraged. He grabbed her by the arm, took her to a telephone booth at the restaurant, phoned a doctor in New York, and in her presence said to him, "Doctor, I've had it. I'm putting my wife on a plane first thing tomorrow morning, and I want you to either fix her up or keep her there." The shock of hearing this clear-cut message from her husband clarified something to the patient that had been ambiguous for some time; the secondary gain accruing from her phobia was at an end; instead, there was the warning of mounting secondary loss. She complied with her husband's decision and flew to New York.

Initial examination revealed, in addition to other relevant history, a HIP profile of 2–3, intact. It was also quite clear that she was highly motivated and quite prepared to tackle the problem seriously. She was given instructions on how to restructure her perspective toward dogs. In the course of the next few weeks and with the help of a cooperative friend who owned a dog, she instituted a gradual desensitization and reorientation toward dogs to the point at which she held the dog and permitted him to lick her palm. At this point, she knew she had recovered, so she phoned her husband and asked him if, when she returned home, he would buy her a dog as a pet.

In this case, the rather precipitous shift from secondary gain to secondary loss was a major factor in the treatment momentum. The fact that her husband no longer considered her symptom cute, but viewed it as a serious threat to their marriage, shifted the equilibrium she had established so that she was open to therapeutic intervention.

Secondary loss can be neutralized early if, in the treatment atmosphere, a state of flux is developed by the physician to enable the person to re-evaluate his or her resources, both positive and negative, and establish new perspectives that place emphasis on the individual's strengths. Compensation policies developed and fostered by the Department of Veterans Affairs and many insurance companies unfortunately either do not take the secondary gain factor into account or, despite its importance, ignore it and tend to encourage its perpetuation by paying people to remain sick. This becomes further emphasized when, from the patient's point of view, he or she is punished for getting well: Monetary compensation is either reduced or removed completely. Recovery, as defined by the Department of Veterans Af-

fairs and insurance companies, does not necessarily correlate with the patient's ability to return to his or her previous level of functioning in society. A system that puts pressure on a recovering person to maintain disability to receive compensation complicates the rehabilitative atmosphere: The secondary gain, compensation, often outweighs the subsequent secondary loss in which a patient becomes a nonfunctioning member of society because of the need to perpetuate his or her symptom to maintain financial security. If insurance companies provided lump-sum settlements rather than doling out payments as long as the symptom is present, perhaps patients would not be encouraged to prolong their symptoms.

Unknown numbers of veterans have played the game of being professional invalids until the peak years of their lives passed them by, only to realize in retrospect that it was too late to become involved in the mainstream of living as a productive or creative person. This problem is compounded by the fact that such patients often form the kinds of support systems around the network of the helping institution (e.g., a Veterans Affairs hospital) that others have in their work and social environment. Some of these patients really have no good alternative and would lose too much social connectedness if they were to relinquish their patient status.

This problem of economic or other compensation for psychiatric dysfunction points to the fact that secondary gain insidiously becomes secondary loss. Crisis intervention theorists have described a crisis as a time when old equilibria are shaken up and new methods of coping are established (Caplan 1964). There is a certain critical period, usually 1–5 weeks, during which the individual is relatively open to new or alternative coping strategies.^{*} After that time, the patient tends to become fixed in his or her new adaptation, and the same amount of input has less effect. This is another way of saying that timing is critical and that a small intervention, occurring before secondary gain and loss have become cemented into the lifestyle of the patient, can be far more effective than even major intervention at a later point.

One of the major lessons learned in World War I from a psychiatric point of view was that after a combat soldier was evacuated beyond the sounds of battle for disability reasons, it was extremely difficult to return him to fighting effectively in a combat situation,

^{*}The Chinese ideogram for *crisis* consists of two characters, one denoting *danger* and the other *opportunity*.

even though he may technically have recovered from his physical trauma. This was overlooked in the early days of World War II, but later there were some occasions when it was possible to take advantage of this knowledge, as in the following example.

During World War II, a battalion was trapped in a valley unable to move forward or backward. It was exposed to a constant dive-bombing and artillery attack without any opportunity to fight back. There were many simultaneous casualties, and the situation was clearly frightening.

During the attack, one of the medical aid men roamed about the field even though he had been ordered to stav in his foxhole, and in his dazed wandering he unconsciously veered toward the rear. His sergeant, ran after him and tackled him, throwing him to the ground to avoid flying shell fragments. The soldier, in his confused state, cried out, "I can't stand it anymore! I can't stand it anymore! I must get out-I must get out!" The battalion surgeon, pressed to hold onto all personnel that he had, grabbed the soldier by his collar and directly said to him, firmly and clearly, that under no circumstances would he be evacuated, except when physically wounded or dead. The only way out would be on a litter. Once that message was clearly understood, the soldier was ordered to dig himself a hole and stav there until ordered out. He did, in fact, dig the hole deep enough to give him ample protection. That evening, the battalion surgeon visited him, and, although the soldier was still trembling and shaken, he agreed with the surgeon that he felt he could take hold of himself. The following morning, before the fighting resumed, the aid man went over to the surgeon and thanked him for helping him gain control of his fear. For the rest of that campaign, the soldier served competently and courageously as a combat aid man. In the ensuing month, the surgeon was wounded and evacuated to the States.

Two years later, the surgeon received a letter from the aid man at Christmas, with the information that the soldier had served successfully, been wounded, and recovered. He took occasion to wish the surgeon a Merry Christmas and a Happy New Year. For several years after, the surgeon received a Christmas card, renewing contact and conveying a sense of both warmth and appreciation for the help that the man had received in maintaining his sense of dignity and selfrespect.

There is no doubt that if the surgeon had evacuated him as a psychiatric casualty labeled *combat fatigue*, this soldier would have joined the myriad of others in the assembly line of accepting compensation for disability. The annual Christmas cards seemed to be statements of reaffirmation that the soldier preferred the option of being a man with his self-respect intact.

In this situation, secondary gain and loss were prevented before they started. It is rare that therapists find themselves in a situation that permits such preventive work. However, it is often possible to intervene along with the patient and his or her environment in such a way as to minimize secondary gain and secondary loss, as in the following example.

H.T. was a 37-year-old single woman who was a buyer in a department store in a large city outside New York City. One rainy night as she was waiting in her car at a red light, a truck hit her car in the rear, causing a condition diagnosed as *whiplash*. In the inevitable litigation, it was clear that the truck was responsible for the crash. Her response to physio-therapy was poor; there were no physical or laboratory signs to support the discernible pathology although she had been diagnosed as a whiplash casualty. Because of her poor response to traction and physiotherapy, she was advised by her internist to travel to New York to obtain help for the pain through hypnosis.

She arrived at the doctor's office in a chauffeured limousine, indicated that she was registered at a Park Avenue hotel, one of the most luxurious in the city, and was prepared to stay in the city as long as the doctor found it necessary to cure her. Her HIP profile was 1–2, intact. The therapist immediately confronted her with the importance of litigation aspects of the case and taught her some self-hypnosis exercises to reduce muscle tension in her back and neck muscles and to develop a psychological numbness in the painful area. But, following these instructions, she was given the following clear-cut advice:

- It was clear that she had a good case in court and it was also clear that the insurance company knew that.
- To obtain the best benefit from the exercises with self-hypnosis, she would do herself a great favor by returning home as soon as possible, engaging a competent lawyer, and demanding the best lump-sum settlement possible. If the pain was still present after she reached the settlement, she should then return for further instructions and extensions of therapy using self-hypnosis.

She was surprised that the therapist limited the treatment to only one session; she had traveled all this distance and had been looking forward to a long stay in New York. That night she called her lawyer; with his agreement and encouragement, she returned home and within 2 months managed to arrange a satisfactory lump-sum settlement with the insurance company. At the same time, she was in weekly phone contact with the psychiatrist in New York and continued with the self-hypnosis relaxation exercises. By the time the settlement was completed, her whiplash syndrome had disappeared.

She regarded her trip to New York as a "miracle experience" and told her referring doctor so. She said she could not understand how the power of hypnosis could so quickly contain and eliminate the pain when the previous therapies had failed.

What is intriguing in this situation is that the effective operational therapeutic factor was the woman's unconscious acceptance of having the money issue settled as quickly as possible and her willingness to realize that she was too young and had too many interesting things to do in life to become blocked into a lifelong battle for bits of money from the insurance company. She tended to underplay the secondary gain and loss factor and to attribute the success of this encounter to hypnosis.

The potential influence of secondary gain and loss is of greater concern when a clinician is treating a highly hypnotizable person rather than someone who is poorly hypnotizable because of highly hypnotizable people's external focus and tendency to uncritically accept the views of others. Secondary gain and loss can for them be experienced as hypnotic-like suggestions to maintain disabling symptoms.

Internal Considerations

Self-Esteem

It is helpful to bear in mind that virtually any symptom that prompts a patient to see a doctor for help constitutes an assault on that person's self-esteem. The patient may have experienced some public humiliation, as with a phobia, or he or she may feel privately constricted. In any event, the restoration of the patient's previous level of self-esteem is an important consideration. It is even possible that, as a consequence of therapy, the patient's self-esteem is enhanced beyond the pre-illness level. However, the first goal in the treatment encounter is to cope with the deficit in self-esteem associated with the illness.

The process of restoration can begin even during the data-gathering phases of the treatment session. If the therapist establishes an atmosphere of collaboration with the patient, in which the patient actively participates in defining the problems along with the therapist, the patient's intelligence and capacity to achieve perspective on his or her own life in this way are acknowledged rather than belittled. It is important from the very beginning to convey to the patient that he or she is seen as a person with a problem rather than as a sick object. This means acknowledging the patient's strivings to overcome the symptom as well as the dimensions of the symptom itself and establishing an atmosphere of cooperation in the service of mastery rather than coercing or manipulating the patient for a given objective result.

The following case example helps make this point. I (H.S.) am not proud of my role in this event, but it happened at a time when I was a young psychiatrist in the army during World War II, and I had just learned how to use hypnosis.

I was working in the psychiatric section in the station hospital at Fort Meade, and a young black infantryman was brought in with a paralyzed left arm. After examination, we made the diagnosis of hysterical paralysis, and with my fresh knowledge, I induced hypnosis and immediately removed the symptom. His left arm paralysis would return each time I touched the back of his neck as a posthypnotic signal. The returned symptom could be removed by another pre-established signal. The drama of this procedure attracted a great deal of attention in the hospital, and as a result it was repeated many times over a period of a week. Even the commanding officer of the hospital came to watch it happen. To my embarrassment, I admit there was an almost circuslike atmosphere around the case. Finally, we decided that the show was over and with a sense of reluctance I sent the man back to duty because it was hard to give up such a "good" patient.

Within 3 days, he was readmitted to the hospital with both arms and legs paralyzed. That taught us a great lesson. By going into a greater state of paralysis, he answered our lack of sensitivity and our awareness of the humiliation that he had been going through by being used as a vaudeville performer. He was again rehypnotized and again all the paralysis of both upper and lower limbs was removed. This time, we related to him as a person instead of as an amusing object. I learned that he was having difficulty in a company that had combined black and white soldiers with a sergeant who was not terribly competent in dealing with racial problems. In discussing the matter with him, I learned that this situation was the factor that provoked the symptom: His "paralyzed" arm prevented him from punching the sergeant in the mouth. After I told him that I respected his complaint and apologized for our conduct, I was then able to establish a liaison with the reassignment officer and have him assigned to a more appropriate unit, which he accepted. A 6-month follow-up revealed that he was still working effectively as a soldier in the new unit.

This was clearly an instance in which the dignity and self-respect of the patient were totally ignored during the initial treatment. His evident therapeutic potential was not mobilized until attention was paid to his dignity and self-esteem, and the therapeutic effect was then sustained. This case could have been misunderstood as an example of the inevitability of symptom substitution or the danger of hypnosis. In fact, the critical issue was the initial disregard for the patient's self-respect.

Motivation and Incentive

There are some patients who believe that their only contribution to the treatment situation is to bring their bodies into the doctor's office. Harry Stack Sullivan had an approach that effectively dealt with this issue. Without saying it directly, he inferred by his conduct with the patient during the first interview this question: "Why should I be interested in you or your problem?" In that atmosphere, the patient sensed his or her obligation to become involved in the interaction with the therapist. In this manner, Sullivan subtly evoked a mobilization of incentive and motivation to move therapy along.

Unless there is adequate incentive on the patient's part, the potential for using a capacity for change can be lost or paralyzed. Sometimes simply focusing on the importance of the patient's capacity for change is enough to make this factor operational. Even with other favorable treatment factors, the therapy can ultimately result in failure without patient motivation. At times, it can be important enough to delay further treatment until the patient develops adequate motivation. This is especially true for individuals who have low-intact HIP profiles, the Apollonian personality types. Because they have a low leverage effect with their self-hypnosis, motivation compensates for the reduced leverage. For example, it is quite common for the Apollonian to successfully use self-induced hypnotic numbness for pain control during a period of high motivation; but when he or she becomes indifferent, the perception of pain returns. In contrast, the person with a Dionysian personality type, because of his or her high leverage effect with self-hypnosis, can maintain the compensatory numbness from the self-hypnosis exercise even when motivation is less than optimal.

Another reflection on motivation is that, in our early studies with cigarette-smoking control, we discovered that people who had the least likelihood of success in smoking cessation were widowed or divorced people in their fifth decade or older with no children or close family ties. Apparently in the case of smoking cessation, the absence of external family supports has a profound influence on the patient's internal sense of motivation to make a change that could well prolong his or her life.

Distancing

Another consideration in assaying a patient's capacity for change involves providing an opportunity to perceive alternatives—that is, to develop a sense of distancing. Once the problem is identified and related to the personality tendencies of the patient, spelling out alternatives to deal with the problem becomes an exercise in preparing the person for making a choice. One of the major difficulties that emerge in therapy is a sense of entrapment. When the therapist enables the patient to see the problem in such a perspective that alternative choices become apparent, the patient is challenged to make a choice and to consolidate his or her commitment to the decision. It helps to make the patient aware that a symptom is usually a double statement, one of stress as well as the capacity to respond to that stress. For example, fever is a statement that the body may be invaded with bacteria and that the body is defending itself against the invasion by raising the temperature, which enhances the body's capacity to combat the bacteria.

Reformulating the symbolism of a symptom into a less extreme form is also helpful. Many symptoms unnecessarily dramatize a problem and are overreactions to a given stress. A therapeutic approach that attenuates but does not eliminate the symptom may immediately acknowledge the communicative effort that the symptom represents, and at the same time establish the momentum necessary for entirely phasing out the symptom under new conditions of security. Throughout this process, insight, as such, may be minimal, as illustrated in the following example.

A 40-year-old lawyer was unable to swallow food or drink unless his wife either held her hand on his throat or sat at his left side so that he could touch her as he ate with his right hand. He was anxious, tense, and depressed and could not sleep without sedation. This condition had existed in various degrees of severity since he was forced to leave his native country 1 year before. At that time, a revolution had instituted a dictatorship that would have imperiled his life if he had not drastically revised his allegiance to friends and clients within the country. Instead, he chose to flee to the United States to carry on his work.

He had been in treatment with various physicians for several months, but the crisis that led to his referral to me (H.S.) was a series of social and business meetings with important persons in regard to his legal work in the near future. Among other anxieties, the anticipation of humiliation by not being able to swallow food or drink at these impending functions led him to near panic. We had three sessions, 1 hour a day for 3 days, in which to work.

He was able to go into a grade 3–4 trance state. Among other data, these associations were elicited: his vengeful anger at his partner for betraying him, his transient hope that his exile would be brief, his need to build a new life here, his concern about his mother back home and in need of an eye operation, his fear of never seeing her again, and his statement, "I have to swallow all this."

During the second session as the patient was in a trance, I introduced the notion that he was mixing metaphors that is, it seemed clear that there was something he could not swallow and still maintain his dignity as a person, but was this something food, guilt about his mother, or the dictatorship that he could not accept for himself? That night, he slept without sedation for the first time in more than a year. When he returned the next day, he said the phrase "mixing metaphors" had turned in his mind ever since he had left the day before. In the trance, he almost ecstatically declared that he now saw more clearly than before that to be a man he must not swallow (i.e., accept) the course of his partners, but he must swallow food and drink to survive as a person.

He was brought out of the trance. He jumped up and paced back and forth, declaring, "Now I am sure I can do it." I presented him with a glass of water, then a cracker. He swallowed with ease. His eyes popped with excitement. At his request, I called in his wife and brother who were in the waiting room. He demonstrated his regained capacity to swallow to them. His wife clapped her hands and wept with joy.

Having spelled out the alternatives, the patient's freedom to use these alternatives becomes the focus of therapy. Circumstance, economic issues, and a variety of other milieu factors are all important, but once they are dealt with, the therapist must focus on the exercise of freedom. Typically, highly hypnotizable patients may want to attenuate this exercise of freedom by taking into account the sensitivities of others, whereas patients who are poorly hypnotizable may immobilize themselves through the exercise of their own internal judgment.

Capacity for Change

The HIP is a useful source of information regarding a given patient's capacity for change. The clearest distinction is between patients who score in the intact range versus those with soft and decrement profiles. Because of the association between a soft and decrement profile and severe psychopathology (see Chapter 7, Hypnotizability and Severe Psychopathology), these patients as a group show relatively little capacity for internalized commitment and change. The HIP becomes a rapid way of identifying patients who will require interventions with medication and external support rather than therapeutic strategies, as therapeutic strategies require collaboration and an ability to maintain a commitment to engage in therapy.

We now turn our attention to patients with intact HIP profiles. An intact performance on the HIP indicates a patient's capacity to concentrate and internalize new concepts, with an ability to mobilize his or her own psychological responsivity and biological resources. These variables are then put in the context of the current situation and what matters most to the patient as he or she presents for treatment. It requires an interactive approach in which the therapist begins with the patient's identified ability to attend to a task and then chooses a treatment strategy that taps into the patient's resources. This is a biopsychosocial model for change (H. Spiegel and Greenleaf 1992). In particular, we look for the patient's ability to mobilize internalized commitment and to sustain this commitment until closure is achieved.

Patients with the ability to commit to change are as a group capable of understanding and making use of environmental support. At the same time, they can filter out interference in the environment and minimize secondary gain and loss. Consistent with the general good pattern of mental health within this group, we expect they can sustain enough motivation and incentive to make improvements in their lives and that they have sufficient ego functioning to distance themselves from their symptom so they can consider alternatives. Because the intact group represents a very broad group of people with wide variation, the measures and assessments we propose help guide the clinician to place the person on a cognitive, emotional, dissociative spectrum. Specifically, the HIP and the 10 questions that identify the personality styles are administered early in the session to help the therapist elicit strengths and vulnerabilities while pinpointing special problem areas. We find it useful to invoke the Apollonian-Odyssean-

Dionysian personality type distinction in organizing this information and in deciding how to approach the patient.

In general, Apollonians are somewhat less flexible than the other groups and more critical regarding the necessary conditions for change. They are prone to ask numerous questions about a proposed treatment strategy and are often quite hesitant about becoming involved in it. However, if they accept a treatment approach, they are likely to internalize it and maintain the change with closure. They are also relatively independent of interfering environmental forces. Dionysians, on the other hand, do not usually exercise the same critical judgment before affiliating with the new treatment strategy. As a consequence, they can accept the strategy, but whether it is well internalized and sustained and becomes an accepted change with closure is more dependent on the support system around them, both positive and negative. Therefore, it is important to bear in mind social and environmental factors when assessing a problem with the Dionysian. These factors may be especially important in producing a complaint, and they are certainly important in sustaining any change.

The mid-range group, the Odysseans, tend to be less critical than the Apollonians in the initial acceptance of the new treatment approach or in the choice of alternatives. At the same time, they do not show the same easy affiliation with new ideas as Dionysians. As a consequence, they represent a mid-range both in their flexibility to change and in their ability to need or respond to support systems to sustain a change.

Summary

The therapist's task is to collaborate with the patient in reviewing and simplifying the data assembled and to develop an effective strategy for action. We use the Weldon model to make clear the point that the therapeutic approach chosen is not *the* answer to *the* problem; rather, it is *an* answer to *a* problem. It is one of several possible puzzle forms that can be applied to a given problem.

Often, the most difficult task for the therapist is initially identifying the relevant problem. We have attempted to make somewhat more systematic the intuitive art of problem assessment. This is not a formula but a road map. Taking into account such factors as support systems, secondary gain and loss, self-esteem, motivation, distancing, and the capacity for change, the therapist should have a fairly reliable estimation regarding the most important problems and the patient's own resources in coping with them. The process of formulating the problem lends itself to the development of a restructuring strategy that allows the patient to see the problem from a new perspective that facilitates its potential resolution. This page intentionally left blank

CHAPTER 10 Restructuring

We know that degree of psychic health is not determined by the absence of conflicts, but by the adequacy of the methods used to solve and master them.

> Helene Deutsch The Psychology of Women

The very least a patient is entitled to when he consults a psychiatrist is a new point of view.

Harry Stack Sullivan

Hypnosis involves focused attention. The key therapeutic question is what to focus on. The effectiveness of an intervention depends in large measure on its capacity to excite the commitment and motivation of the patient. The recommended approach must make sense in some deep way to the patient but, at the same time, must not be mundane. It must help the patient formulate an old problem in a new way that points toward resolution. In other words, the problem must be restructured.

This chapter is written with the presumption that a therapist is working with a patient who is comparatively well integrated, who scores in the intact range of the Hypnotic Induction Profile (HIP), and who has a clearly defined and reasonable symptomatic complaint for which brief treatment, such as restructuring, is appropriate. It is also assumed that the therapist and the patient have either tacitly or overtly reached a decision that the symptom can be approached with a brief treatment strategy and that long-term intensive psychotherapy either is not indicated or might be appropriately considered after a trial of brief treatment.

Having taken a history and administered the HIP and the Apollonian-Odyssean-Dionysian Personality Inventory (see Table 5–1), one has a clear idea of the problem to be addressed and the capacity and motivation of the patient for dealing with the problem. The task then is to develop a treatment strategy using self-hypnosis that mobilizes as

many of the patient's personal resources as possible in the service of effecting a change. This is particularly important regarding long-term outcome of treatment. It is not difficult to think of ways of "ordering" a patient to relinquish a symptom with or without hypnosis. The problem is that even if such a strategy should work, the interpersonal message is that the outcome rests simply on the patient's compliance with the therapist rather than with the patient. Thus, the patient feels no enhancement of self-esteem; he or she has merely done what the therapist suggested. If the strategy should fail, the patient feels justified in being angry and disappointed in the therapy rather than in him- or herself. Furthermore, change that involves commitment to and belief in the process is more likely to have ongoing momentum.

The same kind of problem occurs when so-called aversive behavioral techniques are used. These techniques tend to be unpleasant, and although the concept was derived from the field of operant-conditioning psychology, it is well known that a rat learns far better from positive than negative reinforcement (Bandura 1969). For example, to tell a patient in the trance state that from now on cigarettes will smell and taste like excrement is to create more problems than one solves. The therapist is relying on the drama and strength of the trance experience alone rather than on instilling the real conviction that smoking is harmful to one's body. Furthermore, the therapist is relying on the strength of an illusion: The patient knows that he or she has enjoyed the taste of cigarettes, and an artificial distortion of this fact does not address the fundamental problem of a conflict between one kind of enjoyment and the associated damage to one's body.

Occasionally, more amusing consequences of this type of intervention occur. One psychiatrist who was experimenting with such an aversive technique for smoking received a frantic phone call from a patient several hours after his treatment session. "My house smells awful," the patient complained. The doctor inquired, "Why, are you still smoking?" "No," the patient replied, "but my wife is." The psychiatrist was then obliged to modify the posthypnotic suggestion to include only the smell of cigarettes that the patient smoked.

What follows is a description of the construction of a self-activating treatment strategy using self-hypnosis by which the subject can make use of naturally occurring self-protective mechanisms and dissociative states. This formulation is useful for dealing with a large variety of psychiatric problems or symptoms that call for enhancement of control, including smoking, weight control, pain control, phobias, insomnia, stuttering, asthma, posttraumatic stress disorder, and other less-common behavioral and psychosomatic disorders. As an example, we present the working model used to formulate smoking control as a brief and workable exercise for self-hypnosis and then discuss, in some detail, the reasons for this particular strategy and the thinking behind it. This discussion may help the therapist become familiar enough with the approach that he or she can use the model and its theoretical background and adapt it to particular patient needs. The fundamental concept is the goal of helping the patient to develop a new frame of reference that includes his or her old and problematic behavior, but in a different context. In the section Philosophical Background, we present some of the reasoning behind our restructuring treatment strategy in more detail.

Time Concept

To begin, let us examine several generalizations about the manner in which patients relate to a troublesome symptom such as smoking. We have found it helpful to express these generalizations in terms of the patient's view of the passage of time. As a rule, people with a symptom that they have not mastered seem to occupy one of two extreme positions with regard to time, although they may alternate between the two. For example, those who panic in a phobic situation or feel victimized and overwhelmed by an urge to smoke or overeat tend to see time as an unceasing rush from which they are helpless to extricate themselves. The image is that of a person in a canoe, caught in a furiously rushing stream, unable to control the course of the boat. Such a smoker becomes anxiously preoccupied, lighting cigarette after cigarette, as if to confirm her knowledge that she is trapped by the habit and that it will lead to her downfall.

However, the very extremity of this view forces some individuals to take refuge in avoidance, a kind of *la belle indifférence*. Such a person may carry on smoking or phobically avoid certain situations as though there were no consequences to his actions. In this situation, friends and family members may be distraught, all the more so because of the patient's apparent denial or avoidance. The patient, in turn, may reinforce his manner of unconcern as a defense against the surrounding anguish. It is not uncommon to find smokers who seem convinced that lung cancer and emphysema can happen to other people but not to themselves. Or, they will say things such as, "By the time I get to be old enough to have cancer, I won't want to live anymore anyway." This manner of denial corresponds to a static or frozen representation of time, in which time is presumed to repeat itself. For such a person, the present seems unconnected to past and future consequences. Yet, by a simple transformation, this position really implies its opposite—panic and submission.

The avoidance of real consequences implies that there is something overwhelming that is being avoided. The more massive the denial, the easier it is to slip into panic when faced with the consequences of something such as smoking or a long-feared phobic situation. Thus, one position really implies the other, and a given individual may flip back and forth between avoidance and panic with no change in his or her basic orientation. This is typical of individuals with posttraumatic stress disorder, who fluctuate between immersion in reliving the trauma with intrusion and hyperarousal symptoms, and avoidance of the traumatic memories with numbing and amnesia (American Psychiatric Association 2000; Horowitz et al. 1993). On the other hand, some individuals characteristically use one defense or another. It is our impression that Apollonians tend to use anxious obsessional preoccupation and that Dionysians are prone to avoidance and denial.

A particularly good clinical example of this paradigm of temporal distortion is the case of the patient who stutters. The treatment for stuttering with self-hypnosis is discussed in Chapter 17, Miscellaneous Behavior Disorders, but it is interesting to note here that many people who stutter are actually rushing into speech, although they sound as if they are speaking haltingly and slowly (Brady 1971). They are thrown off of their normal temporal rhythm while speaking, and they alternate between periods of prolonged delay in producing sounds and attempts to run too many sounds together at once. Thus, they literally alternate between a rushing and a freezing of speech. The therapeutic approach described later, building on the work of Brady, requires that the patient establish for himself a leisurely but regular rhythm around which he can orient speech. This rhythm requires that the subject neither rush nor freeze the flow of his speech.

The temporal model applies to the resolution of other symptomatic problems. Effective use of time requires an integration of the two extreme, opposing views of it. Problem resolution requires a recognition that a real problem exists that should not be avoided but that it is not overwhelming.

The Paradox of Fighting Against Oneself

Many people manage to make changes in their lives only with the feeling of forcing themselves to fight the symptom. The pressure of time is taken seriously, the toll of time is weighed, but a tremendous amount of emotional energy is expended in maintaining the change. For example, someone on the brink of death may give up smoking, or a person may fight a phobia because not doing so would mean economic ruin. In this type of forced change, people who are trying to stop smoking feel that they are being deprived of a pleasure, rather than that they are doing themselves and their bodies a favor. Often, people who are trying to stop smoking become so unpleasant to others around them that friends and family members beg them to resume smoking.

A forced change is often experienced as a deprivation rather than as a positive assertion of self; as such, the change is unstable. A person in this situation often has the feeling that she cannot manage two problems at once, and as soon as some other pressure develops in her life, she reverts to the old pattern of avoidance and denial. This pattern of problem involvement is illustrated in Figure 10–1. The labeled diagrams on the right side of the figure represent alternative approaches to a problem. An individual may alternate between obsession about and denial of a problem. If she attempts to solve it by fighting the symptom, she experiences a sense of deprivation and emotional strain. The corresponding temporal attitudes we have described are illustrated on the abscissa of the figure.

Self-Body Concept

On the ordinate of Figure 10–1 is another dimension that clarifies the distinction between immersion in a problem and gaining mastery over it. This dimension is the type of relationship between oneself and one's body as implied by the position one takes regarding a given problem. A position of obsession with the problem or denial of it implies that the person makes no clear distinction between himself and his body. He does not distinguish between desire and need or


RESTRUCTURING MODEL FOR TREATMENT STRATEGY

between impulse and action. In the case of smoking, if a person experiences a psychological desire to smoke, he assumes that his physical behavior must follow suit. Or if the person who smokes is coping with his anxiety about smoking by denying its consequences to his body, the implicit assumption is, "If I do not think that tobacco will harm my body, in fact it will not harm my body." Psychological construct and physical experience are not distinguished: Impulse becomes action; denial of risk seems to imply real safety.

However, if the pressure of the passage of time becomes sufficiently strong, the person may cope by fighting the problem—fighting smoking, for example—in essence, fighting her own body. Her position then becomes, "It is me versus my body: I want and need to smoke, but my body will not let me." The more she asserts that she is against smoking, the more powerful the idea of smoking becomes. In this context, fighting a symptom is a testimony to the symptom's strength. When God said to Adam and Eve, "Don't eat the apple," the end of Paradise was at hand. The individual has a sense that she is opposed to her body. Signals from the body are thus to be avoided, for they suggest that the body is winning the battle. The individual is forced to deprive herself of real contact with a part of herself and begins to feel that she is "denying" herself. This is true in two senses: The individual may feel that she is literally denying herself some gratification, such as smoking, and she may also feel a denial of any positive relatedness to her body because she is in the paradoxical position of fighting her body.

Aversive techniques fall into this category of problem resolution. They put the patient in the position of fighting his symptom. Such an approach may appeal to the masochistically oriented individual, to whom the concept of self-punishment is familiar. He may succeed in stopping smoking by fighting his body, but the masochistic dynamism goes unchallenged or is even gratified and reinforced. In such a position, the individual is uncomfortable and out of tune with himself, but his new problems are more relevant to the way in which he is attempting to change the habit than to change itself.

Restructuring: The Dialectical Resolution

The therapeutic restructuring section of Figure 10–1 suggests a means for constructing a new perspective in which to view an old problem. The patient is invited to view the relationship between himself and his body as dialectical. That is, the patient is not his body nor entirely separate from it. The patient cannot ignore his body, but he is not the same as his body. Thought and action are related, but they are not the same. Impulse cannot be denied, but it also need not be followed by action. Sensations are real but not absolute. An individual can influence his body but within limits. The patient is different from his body but cannot live without it. The individual is invited to restructure the relationship between self and body, hence the term *restructuring strategy*. In overcoming a symptom, the patient affirms what he is rather than fighting or denying it.

In the case of smoking, the affirmation of relatedness is achieved by focusing on the patient's relationship to her body during the trance state in the following manner: 1) For my body, smoking is poison;

2) I need my body to live; 3) To the extent that I want to live, I owe my body respect and protection. The focus is on affirmation of self and body through protecting the body. The emphasis is placed on establishing a relationship of respect between oneself and one's body. It logically follows that in the course of establishing this relationship, one naturally protects one's body by giving up smoking. The habit becomes less important rather than more important, as it would through obsession or avoidance in regard to the impulse or through fighting it. One is not fighting the impulse; rather, one is seeing that it can become less important when the focus is instead on the relationship to one's body. The habit itself is placed in perspective, and the individual is invited to rearrange her view of herself and of her body in the process.

One young man with an episodic binge-drinking problem listened to a similar restructuring strategy linking alcohol to damage to his body. He came out of the hypnosis looking a little dazed and asked, "You mean, like the body is the temple of the soul?" This approach resonated with an earlier view he had of his body when he was an athlete in high school, and to his surprise (and ours), he stopped drinking.

This technique is separate from, but closely related to, the trance state. The dissociated state experienced during the HIP is used as a model for suggesting therapeutic possibilities. The emphasis is on maintaining a dual focus. The patient learns to perceive his body in new ways and explores his capacity for relatedness to his body. The patient learns that the body can provide new sensations and also that he has more control than he thought over the sensations that he experiences. The crucial measure in the HIP, the control differential, also suggests to a person that he can alter his control over his body through feeling more control over one hand than the other. Thus, the trance experience can teach an individual that he and his body are not the same and that one can alter one's relationship to one's body in interesting ways.

Because the trance state is characterized by intense focal concentration with diminished peripheral awareness, it can be used to maximize an individual's restructuring or reorientation to herself and her body. The individual can use the receptive attentiveness of the trance experience to intensify her focus on protecting and respecting her body. Consequently, the individual can diminish her potential for being distracted by the desire to smoke or becoming caught up in old ways of viewing the problem. The desire to smoke is seen not as the main (and therefore overwhelming) problem, but rather as one example in an array of ways in which the patient relates to her body. In many ways, for example, the patient may be quite respectful of her body (e.g., exercising regularly, eating carefully, wearing a seatbelt). Smoking behavior is seen as just one more way in which a person constitutes her mind-body relationship. The focus is therapeutically shifted to what the patient is *for*, which is protecting and respecting her body, rather than what she is *against*, which in this case is smoking.

This intense central focus with diminished peripheral awareness in hypnosis becomes a model that can be used in various ways depending on the symptom. For example, one can use the concentration to focus on respecting one's body, or one can use the diminution of peripheral awareness to filter out unwelcome physical signals, such as pain. In the treatment strategy for pain, the input signals are reprocessed in a new way: The patient is taught to alter his relationship to his body by setting up a filter that takes the hurt out of the pain between the painful physical signal and himself. This technique is discussed in Chapter 15, Pain Control; again, it involves helping the patient reorient his relationship to his body.

Conversely, such a technique can be used to help an anxious person avoid having her body caught up in emotional tension. For example, the individual can be taught to picture interpersonal difficulties on an imagined movie screen while maintaining a sense of floating, relaxed buoyancy in her body. This visualization technique is a method of developing a sense of relatedness between self and body, but in this case the filter is established using the metaphor of the screen to prevent painful psychological signals from influencing the body unduly. The use of a split-screen strategy in anxiety and posttraumatic stress disorders is an explicit attempt to help the patient restructure her traumatic memories by facing what happened while developing a new point of view that acknowledges not only what happened but also what the person did to protect herself or someone else (see Chapter 20, Hypnosis in the Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder, and Dissociation).

The restructuring approach is represented in Figure 10–1 by a variation on the yin-yang model, the classic Eastern symbol for a dialectic. As an individual develops this paradoxical sense of distance from his body and inseparability from it, of both being his body and being different from it, he can learn a sense of mastery over a symptom by putting it in a new perspective. This process is what is meant by *therapeutic restructuring*; the patient restructures an old problem

in a new way. In this way, the patient feels that he is affirming rather than denying himself. In this sense, the therapeutic strategy is designed to take advantage of an individual's natural nurturing and protective urges. The strategy becomes self-reinforcing because the patient feels affirmed by what he is doing. The patient is reinforcing his own sense of self and therefore is minimally in need of external reinforcement or commands to maintain the change. This is the general model for depicting a problem or symptom and for restructuring it in such a way that change becomes a mastery experience and an affirmation of self rather than a struggle. Further examples follow in this chapter.

The Nine-Point Model

The nine-point model (i.e., the notion of altering premises to extricate oneself from a reciprocating cycle of paradoxical demands) is discussed by Watzlawick et al. (1974). Their explication of the selfperpetuating nature of paradoxical interactions, which we have placed in the context of transformation, is useful, although we disagree with their notion that therapeutic interactions necessarily require manipulation as opposed to clarification. If one is encouraging a patient to enlarge his perspective of himself, one is inviting his collaboration, not engaging in manipulation.

Watzlawick et al.'s use of a geometric puzzle as a way of communicating their idea of second-order change is instructive (Figure 10-2). The problem posed is to connect a series of nine dots arranged in three parallel rows, using four connected straight lines, and without lifting the pencil from the paper. The problem is insoluble as long as an individual accepts the unwritten visual premise that the lines must stay within the confines of an imaginary box. When one expands one's perspective and allows the lines to wander into the surrounding space. one can solve the problem. This is an example of the Weldon model described in Chapter 9, Formulating the Problem, of applying a puzzle form to a problem. This technique simplifies a situation, which lets a patient know that he or she can take a new approach to an old problem. We often use this puzzle with Apollonian patients who are intrigued by its intellectual challenge; it becomes an analogy for restructuring their approach to an old problem. Change becomes a natural consequence of the new perspective rather than a forced issue, leaving the patient with a sense of mastery rather than deprivation.

THE NINE-POINT PUZZLE



(Also used by Watzlawick et al. 1974)

FIGURE 10-2

Summary

If a patient does not differentiate between herself and her body, then she is vulnerable to obsession or denial. With either dynamism, the patient may succeed in controlling the symptom but is prone to having a sense of fighting her body. The patient feels diminished as a personthe victim of forces beyond her control-which results in a chronic sense of deprivation. If such a patient accepts the premise "I am a smoker" and unwittingly assumes thereby that she is the equivalent of her smoking behavior, then to stop smoking means to give up her identity as a person.

On the other hand, if a patient learns to relate to his body in a dialectical sense, he views the symptom or habit as only one of his many attributes as a person. Then, if the patient chooses to respect his body and not smoke, the choice does not challenge his status as a person; rather, it enhances the patient's sense of mastery over his body and himself.

Philosophical Background

In this section, we present the philosophical background and structure of the restructuring strategy. Restructuring is used in conjunction with self-hypnosis in the treatment of a variety of problems, including habits, pain, phobias, and insomnia. The details of using this approach for specific problems are further discussed in subsequent chapters. In its most general sense, the strategy involves an effort by the therapist to crystallize the patient's problem into a few succinct ideas. These ideas help the patient incorporate the idea of change through self-affirmation in a fundamental sense, which includes an acceptance of the unending dialectical struggle between life and death. The ideas are developed in an attempt to help the patient focus on his relatedness to himself and his body and to concentrate on what the patient is for, in this context, rather than what he is against. The aim is that it will become clear to the patient that he has within himself the ability to engage in his own dialectical struggle and to make choices—for example, between smoking and protecting one's body, between feeling like a victim and a survivor, and between death and life.

The premise of existential philosophy (indeed, the source of its very name) is that essence and existence are the same and that one does not live authentically until one has confronted the real possibility of nonbeing. It has been said that one has not lived until one has been close to death. This saying may be better phrased as "One cannot appreciate life without being aware of death." We make thousands of choices every day, most of which involve taking a position concerning our physiological or psychological death. We constantly affirm our desire either to live and be free or to deny death or live as though one were already a bit dead, which is what Kierkegaard (1954) called *the sickness unto death*.

In seeking to explain any mode of therapy, one uses a vast range of theoretical explanations, from the feeling that a mode has worked in personal experience to careful statistical studies documenting efficacy. However, whether articulated or not, every therapeutic approach has at its base some assumptions about the nature of man. The key philosophical elements of our restructuring approach may be understood in light of the personality theories of three of the philosophers who laid the foundation for existential philosophy: Hegel, Kierkegaard, and Heidegger.

The group of people who count themselves as existentialists is a vast and heterogeneous array. Some who exclude themselves from any such membership deserve it more than many who loudly proclaim affinity with the title. As an operational rule, we define as *existential* those philosophies in which *existence* is considered inseparable from or prior to *essence*, the ultimate reality of what can be known. Traditionally, essence was considered ontologically prior to mere existence, which was seen as an imperfect example of essence. A brief review of the history of Western philosophy may clarify this distinction.

Ideal Versus Real

Plato and Socrates created the framework within which the major controversies in philosophy developed. The tension between the "ideal" and the "real" was explored in their dialogues. They raised the question of whether truth lay in the realm of ideas or objects. It does not do justice to the complexity of their writings to label them *idealists*, although this has often been done. They certainly did present a compelling argument for the primary importance of ideas and logical constructs. Others, such as Aristotle and, much later, the British empiricists, put the major emphasis on the primary importance of perception of objects.

This philosophical tension between the ideal and the real has taken many forms—subjectivity versus science, among others. The controversy was alive in the medieval period in the tension between the increasingly rigid scholastic idealism and various objectified and, at times, pagan rules and rituals. St. Thomas, however, dealt with this tension by conceiving of a kind of spirit-body dualism. Descartes (1958) built on this with his well-known mind-body dualism, but he gave primary importance to the realm of ideas: "Cogito ergo sum" (I think, therefore I am).

Mind and Perception

Kant brilliantly attempted a synthesis of the structure of the mind and the reality of perception. His fundamental contribution to Western philosophy was his establishment of the necessity of the relationship between the structure of the mind and perception. What can be known is fundamentally related to our mental capacity to know. His notion that perhaps the resolution of the tension between knowledge and perception lay in paying attention to the integration of mind and body in man provided the background for Hegel's fundamental contribution.

This philosophical dialogue corresponds in a loose sense to the first two metaphors of Ortega y Gasset that were referred to in the Prologue:

The stamp on sealing wax relates to the empiricist position, and the box and its contents relates to the idealist position, defended in its most so-phisticated form by Kant (1965) in his *Critique of Pure Reason*.

Hegel's Dialectical Framework

These alternative schools of thought, empiricism and idealism,^{*} formed the essential background for Hegel's dialectical revolution, which, in turn, laid the fundamental groundwork for existential thinking. In simplified terms, Hegel viewed the empiricist versus idealist debate as resolvable only within a dialectical framework: Humans are both ideal and real, not one or the other; humans are both existence and essence, and neither. Thus, Hegel made existence and essence coincidental and inseparable, although he is still viewed as an idealist philosopher in that the dialectic itself is a product of the mind. Existentialists later went even further by making existence and essence of equal importance, yet the dialectical approach permeates the writing of many of the most prominent existential thinkers.

The theory behind the restructuring approach assumes that humans are neither existence nor essence but in a dialectical sense are both. We examine the human dialectical experience first within the more abstract paradoxes of Hegel and then with the more concrete approach provided by the restructuring strategy.

In his major work, *The Phenomenology of Mind*, Hegel (1961) developed a world view focused on his dialectical understanding of the human spirit. He saw the self as constantly reconciling its opposites: uniqueness with the abstract universality of thought; freedom with the inevitable limitations that freedom imposes. The self is free to relate to these paradoxes in many ways. Hegel wrote primarily in a historical context, as though Western society as a whole were grad-ually evolving to self-awareness, but the process can be seen as an analogy for the development of individual self-awareness as well. Originally, an individual may be totally ignorant of the conflicts

^{*}For the sake of simplicity, we are placing in one group avowed empiricists, such as David Hume, and philosophers of an inductive bent, such as Aristotle. Both might better be called *realists*. They have in common an overriding respect for the primacy of sense perception, although many realists consider the sense experience to be an opportunity to have more general laws revealed, and in that sense they are indirectly idealists.

within himself. As an individual confronts these oppositions and his self-consciousness emerges, he is often at first overwhelmed by them; he becomes the "Unhappy Consciousness, the Alienated Soul which is the consciousness of self as a divided nature, a doubled and merely contradictory being" (Hegel 1961, p. 251).

By working through the dialectic of these various conflicts, the "Alienated Soul" develops a new unity, but it also becomes something different, or altered, in the process:

This dialectic process which consciousness executes on itself—on its knowledge as well as on its object—in the sense that out of it the new and true object arises, is precisely what is termed Experience. (Hegel 1961, p. 142)

An individual feels herself to be entirely unique, yet she thinks in abstract universal ways that deny her uniqueness. The dialectic takes each part of that paradox to its extreme and shows how it collapses into its opposite; in the process, the self becomes these two previously irreconcilable opposites. That is, an individual considers herself absolutely unique, yet the very term *unique* is an abstract word suggesting a trait common to all individuals, rendering the unique universal.

Our discussion of the term *unique* is not merely linguistic trickery. When we think about our uniqueness, we do it in words, which then become the means of communicating ideas (i.e., of transcending our own uniqueness). Our uniqueness is a strong bond with other human beings and a property common to all humans. However, our uniqueness has no meaning unless it can be contrasted with our universality. We are all human and we are all unique: We are not merely *unique*; our uniqueness is universal.

To repeat the paradox, universality is an abstract idea that has no meaning if it does not apply to any individual case. In fact, any single abstract idea is a unique one, differing from all other universal or abstract ideas. Thus, the analytic process by itself is wanting, and the individual transcends the paradoxes that result from it through a dialectical synthesis. The dialectical process thus becomes one in which the individual is able to absorb the paradoxes of his or her existence and create a new kind of unity within the self that recognizes these conflicts and internalizes them.

Similarly, the self must deal with the paradox of freedom and necessity. The self's very freedom is a necessary contingency of life: One is forced to choose all the time, even in denying that there is any

choice (Yalom 1980). Yet, the notion of being bound means nothing without the concept of the alternative of not being bound. We cannot speak of necessity without invoking freedom. The individual must absorb both his freedom and his boundaries to transcend the alienation produced by these self-conflicts.

The understanding of this dialectical process takes time, and on any given issue an individual can be at various stages in realizing the paradoxes that make up his or her personality. The elements of the dialectic are inherent in any situation; we cannot fault anyone for failing to make a dialectical step if the step is never even a possibility.

The conflicts between such elements as freedom and necessity or individuality and universality, along with many others, are inherent in any situation, and an individual may have many degrees of success in reconciling them. This process of reconciling opposites is constant, never complete, and never entirely undone; the process itself is dialectical. To fully grasp the meaning of the dialectic, it is necessary to approach it with a new frame of mind that is not strictly analytic. It is tempting to see the dialectic as merely a new form of idealism-that is, just a new and more complex model to which imperfect reality approximates itself. The dialectic is not an object, but rather a living process in which knowledge is created. It uses logic and perception, but it is misunderstood if viewed as an object in itself. In fact, the critical dialectical step is to see how form and content merge rather than separate. It is in this sense that we understand Ortega y Gasset's third and most important metaphor-that of light-which is referred to in the Prologue: The process of knowing is inseparable from what is known. The dialectic is part of a process of becoming through which we struggle to overcome our self-alienation, an alienation that results from such arbitrary disjunctions as those between uniqueness and universality, freedom and necessity, and knowing and what is known.

Kierkegaard and the Idea of Relating

Hegel's illumination of man's dialectical nature was expanded on by Kierkegaard, who is usually referred to as the father of existential philosophy. Although he disagreed with Hegel on many issues, Kierkegaard was profoundly influenced by Hegel's study of the dialectic. A kind of dialectical irony permeates Kierkegaard's writing style, and his discussion of humans existing in paradoxical relation to themselves is, in fact, a dialectical formulation. His approach is more literary and personal than Hegel's and helps fill out the dialectical theory of personality:

The self is a relation which relates itself to its own self, or it is that in the relation (which accounts for it) that the relation relates itself to its own self; the self is not the relation but (consists in the fact) that the relation relates itself to its own self. Man is a synthesis of the infinite and the finite, of the temporal and the eternal, of freedom and necessity, in short it is a synthesis. (Kierkegaard 1954, p. 146)

In these few sentences of turgid prose at the beginning of *The Sickness Unto Death*, Kierkegaard comes as close as he ever did to briefly stating what a person is. In good dialectical fashion, he hastens to warn us what a person is not as well. It is dangerous to talk only about what a person is, for this is to reduce him or her to a *what*, a thing devoid of the subjectivity that is the basis of our humanness. What he points out is that we exist in that we relate to all things: to ourselves, to our fields of experience, to our environment, and to other people. Lest anyone be tempted to fasten on this relationship as though it, too, were an object (people often picture the steel rod connecting the two ends of a dumbbell), Kierkegaard reminds us that the self can relate to any given relationship we care to name; the self exists through the fact that it does relate. Hence, it is always beyond our grasp.

The two key words in understanding Kierkegaard's theory of personality are *paradoxical* and *relationship*. The self is a paradox in that it consists of the dialectical opposites of freedom and necessity, universality and individuality. It is a set of relations, but more than that, it is always able to relate beyond any given set of relations. Where Hegel used the term self-alienation, Kierkegaard uses the term despair. The first chapter of The Sickness Unto Death is entitled "That Despair Is the Sickness Unto Death." This sickness is a result of the self willing itself to be dead, lifeless, and devoid of the power to relate. This despair (and hence, sickness) occurs when the self treats itself as an object; for example, when a person considers himself nothing more than a given social role, set of ambitions, or collection of habits. A person moves beyond despair when he gives up these "dead" images of himself by acting as more than an object. In Fear and Trembling, for instance, Kierkegaard praises Abraham as one who became himself by giving up his image as leader of a great race of people and by being willing to sacrifice Isaac (Kierkegaard 1954).

This dialectic may be considered a life-and-death struggle. In one sense, sterile constructs compound a "dead," reified understanding of humans in which the living, dialectical relatedness that is human nature is reduced to simple, unchanging statements or ideas. Anyone who chooses to view herself in either purely universal or purely unique terms is denying her fundamental ability to relate. She treats herself as though she were an object, and death is the literal reduction of a living being to the status of an object.

The Confrontation With Death

Martin Heidegger expanded on the theme of death. He viewed the confrontation with death as a critical step in the individual freeing himself to recognize his possibilities of relating. Death, for Heidegger, is the ultimate possibility; it is ultimately certain, but its timing is absolutely uncertain. The confrontation with death reminds us that we are not all the things we might think we are, or even could become, because that confrontation makes it manifestly clear that we might not exist and, some time in the future, will not exist:

[Death is] the possibility of the impossibility of any existence at all.... It is the possibility of the impossibility of every way of existing.... Being-towards-death, as anticipation of possibility, is what first makes this possibility possible, and sets it free as possibility. (Heidegger 1972)

Death is best understood in a dialectical sense: It is both a distortion of human freedom to relate and a reminder of our limitless possibilities in relating. An individual can either be cowed by death and circumscribe her life with fears and limitations, or she can face death and expand her ability to make choices.

Philosophy and Psychotherapy

The philosophical background given in the preceding sections provides a context for understanding the implications of the restructuring approach, which we explore after a brief parallel discussion of the history of psychotherapeutic strategies. The overall aim of the dialectical revolution in philosophy is integration—synthesis—rather than analysis. Analysis is not discredited or abandoned, as in a dialectical sense synthesis has no meaning without analysis. But the thrust of this approach is to view understanding as a tool rather than a goal. Knowledge and experience are to be united rather than dissected.

Psychoanalysis

This philosophical emphasis on action as well as understanding has clear implications for the psychiatric setting. Clearly, a major current of thought to be reckoned with in any discussion of therapeutic strategy is psychoanalysis. Yet, as the name itself demonstrates, the aim of the treatment is analytic, toward separation and understanding of subjective processes. This is done with the conviction that such an understanding makes the unconscious conscious and the irrational rational and thus leads to growth. The connection between this thinking and biological reality is one of the weakest parts of the Freudian system. The instinct theory underlying drives and the economic system of energy replacement are not widely accepted by many modern psychoanalysts and are ignored by most experimental psychologists. But the bulk of Freud's analysis of subjectivity has survived, leaving us with an irony: As he explored subjectivity, he wound up with an object. Psychoanalysis led to objective descriptions of human behavior that were productive but that, at the same time, led to the blurring of distinctions among individuals and to a presupposition that the analyst knows more about a person than the person himself knows. The analyst may know different things than the patient knows about himself, but the contradiction inherent in such a position suggests that something has gone astray.

Jean-Paul Sartre (1969) discussed this paradox in some detail in an article in *Ramparts*, in which he described disruption of an analysis when the patient brought in a tape recorder in an effort to gather "objective" information about the analyst. The latter became quite angry and defensive. Sartre's suggestion was that if turnabout is not fair play, then the analysis is doing something more than it claims. The desire to analyze is converted into a power operation in which the person becomes objectified. The power to know someone becomes the power to limit rather than free him or her.

A further irony appears in Freud's own methods of exploration, which contained many dialectical as well as analytic elements. He developed not one but three typographies of the human psyche: first, unconscious—preconscious—conscious; next, ego—superego—id; and finally, eros and thanatos. The course of his work seems like a dialectical reworking of the same—yet different—phenomena. He was attempting to integrate opposites as suggested in each of the three groupings, and yet he felt that no one description sufficed. The relations among the three typographies are complex at best. The final distinction of eros and thanatos has a particularly existential flavor and is the least-used typography in standard analytic treatment. An excellent review of Freud's work and a discussion of his thinking in relation to Hegelian dialectic is contained in Paul Ricoeur's book *Freud and Philosophy* (1970).

The psychoanalytic method hints at the integration of mind and body, but its tendency is heavily in the direction of separation and the objectification of subjectivity. The technique is most closely allied to the idealist schools in philosophy, which value rational ideas about affect most highly. The Ortega y Gasset metaphor of the box and its contents is apt for the analytic method, which seeks to explore and explain the contents of the unconscious.

Cognitive Behavioral Therapy

In contrast to the psychoanalytic method, methods of cognitive behavioral therapy—initially developed as behavior therapy in the United States—make a point of ignoring subjectivity and focusing on objective behavioral change. B.F. Skinner (1938, 1957), a founder of the operant-conditioning approach to the study of animal behavior, chose to view the mind as a "black box" and behavior as nothing more than the product of input. This position is most closely allied to the empiricist schools in philosophy, especially Hume and other British empiricists. Ortega y Gasset's first metaphor of the stamp and the sealing wax is clearly appropriate to the behavioral approach. The "black box" view of the mind does create some philosophical problems, for the predictability of a response in relation to a given stimulus suggests some nonrandom organization of the mind.

This operational simplification of the brain seems to represent what Bateson (1972) refers to as a "dormitive hypothesis," one that "put(s) to sleep the critical faculty within the scientist himself." Bateson means that a *dormitive hypothesis* is a pseudo-explanation that represents an agreement by scientists to spend no further time examining a phenomenon. In fact, he describes an explanatory principle as "a conventional agreement between scientists to stop trying to explain things at a certain point," for example, Skinner's description of the brain as a black box. It should at least be recognized that such a simplification may make life easier for the investigator, but the resulting principle certainly brings the scientist no closer to the truth than he or she was when the examination commenced. To reduce the brain to the sum of inputs and outputs is to belittle it, even if it seems to become more understandable in the process. At best, the black box assumption may be useful for the purposes of simplifying complex data, but Skinner's attempt to elevate this assumption to the status of philosophical reality is misleading.

The original pure behaviorist emphasis of Skinner's school of treatment was softened as it was transformed into cognitive behavioral therapy. The latter has grown tremendously, filling in part the vacuum left as interest in psychoanalysis waned. It has proven effective in the treatment of many types of anxiety and depressive disorders, with approaches ranging from systematic desensitization to flooding and exposure therapies. The interpersonal and emotional components of these treatments are less openly addressed than cognition in the attempt to alter behavior. One of the tools of this approach is now labeled *cognitive restructuring*. We would be concerned about labeling the major psychotherapeutic approach in our book with so similar a name were it not for the fact that we developed the term *restructuring* for the first edition of this book, published in 1978, well before the development of this approach in cognitive behavioral therapy. There is now a rather large body of literature involving the term *cognitive* restructuring (McMullin and Giles 1981; Meichenbaum 1993; Wells 2000). We are pleased to see the concept growing and being applied in a variety of settings beyond the domain of hypnosis.

Psychoanalysis and cognitive behavioral therapy occupy opposite positions on the spectrum of the psychotherapies. The former focuses on the realm of ideas, and the latter focuses on cognitions and behavior. The analytic position suggests that it is the person who counts and not his or her symptom; those who practice behavior modification deliberately focus on the symptom and not the person. There are situations in which one of these approaches may be the most appropriate because of its focus on the person or the symptom. As discussed previously, the unstructured exploration of psychoanalysis may be most appealing to an Apollonian person, and the structure of

behavior modification may work well with a Dionysian or with an Apollonian who becomes involved in the structure of the technique.

Restructuring

The restructuring model is designed to address both the person and the problem. It is meant to occupy a middle ground between the idealist and empiricist positions, to consider both the person and her symptom. Ortega y Gasset's third metaphor of "clarity inside life, light shed on things" (Marias 1970) is appropriate. The contact with the therapist is viewed as an opportunity for the patient to change her life if she so chooses. It is a chance to "seize the moment" in the Kierkegaardian sense.

The goal is to help the patient avoid subjective escapism from the realities of her life on the one hand and to avoid the trap of objective determinism on the other. The symptomatic individual in a psychiatric sense, or the "unhappy consciousness" in the Hegelian sense, may be seen as one who despairs of transcending the paradoxes that ensnare her. The common denial, "Well, I really had no choice," is an instance of our tendency to escape from our real freedom to choose.

In our formulation, a relatively healthy person is one who has successfully integrated such conflicts and who can therefore act on the basis of the inevitable conflicting elements that make up the human self. He seeks to merge subjective desires with real limitations. The relatively healthy person seizes the moment because he realizes that he is free to act but will not be so forever. Recognition of the value of life is inseparable from recognition of the absoluteness of death. Freedom has no meaning without the limitations of necessity, nor subjectivity without the anchor of objectivity. This concept is the essence of the dialectic. To the extent that people recognize and integrate these opposites, they master their lives.

The restructuring strategy seeks to incorporate this dialectical approach into psychotherapy. The concept is to crystallize a treatment approach that takes into account both a person's limitations and his abilities and then formulates them in a simple and useful way. The idea is neither to focus only on the reasons for doing something nor to focus only on consequences, but rather to focus on potential methods of integrating motivation with consequence. The focus is on affirmation of the person as an integrated whole rather than on aversion or denial. We do not say "don't." The negative injunction is

rather an inferred consequence of the primary strategy. The term *re-structuring* emphasizes the idea that this therapy helps an individual place an old problem in a new perspective.

The restructuring approach requires formulating a problem in dialectical terms as a conflict of oppositions that can then be integrated in a variety of ways, giving the person a choice. For example, if the problem is the habit of smoking, the focus of the treatment, as discussed in the section Restructuring: The Dialectical Resolution, would be three critical points that the patient would be asked to repeat and remember: 1) For my body, smoking is a poison; 2) I need my body to live; 3) To the extent that I want to live, I owe my body respect and protection. This technique reminds the subject that he has a relationship—several relationships, in fact—to his body. The subject's body allows him life; he decides what goes into it and what does not. It is then suggested that the subject make the choice of either treating his body with new respect or conceding that he is willing to give up the life it provides him.

The first statement is particularly important: "For my body, smoking is a poison." It is a formulation that allows the patient to obtain some distance from her body and to relate to it in a new way. The patient can now accept that she has a desire to smoke, but having the desire does not prove that she must smoke. She is merely reminded of the importance of protecting her body, a concept that is reinforced in the third statement.

Several relationships are thus suggested: You can potentially harm your body; you owe your existence to your body; you can be a protector of your body if you choose. To the extent that you choose to smoke, you are killing yourself—both in the literal sense and in the sense that you are treating yourself as an object, not a self-willing relationship, as long as you consider yourself slave to an image. The dialectical nature of the restructuring strategy is particularly seen in its approach to the mind-body problem. The patient comes to understand that she is not the same as her body, but neither is she entirely separate from it. The patient is not absolutely bound by physical urges, but she cannot escape the fate of her body. She can relate freely to her body, but she must relate to it.

The formula is an attempt to reconcile opposition while recognizing the conflict. To use the smoking-habit analogy, the first statement, "For my body, smoking is a poison," is a universal concept. The second statement, "I need my body to live," suggests to the patient his or her individuality. The third statement, "To the extent that

I want to live, I owe my body respect and protection," is a dialectical synthesis of the universal rule and the patient's individuality.

The patient is not merely the universal rule; he can choose to poison his body. But the patient's uniqueness is not unlimited; his life is subject to some rules. The dialectic of freedom and necessity is highly relevant to this series of statements. The patient is free to choose whether he is to live or die. He cannot escape this freedom, and hence the dialectical paradox that he is "bound" to choose.

It is this very paradox to which the restructuring strategy addresses itself: Recognize that you are free to choose, and then make your choice. You are not so free that you can avoid choosing, and you are not powerless in the face of your desire to smoke. The therapist brings the individual to self-consciousness about this particular objectification of him- or herself—"I can't live without a cigarette," the determinist position, or "I won't have any problems with smoking," the subjective escape—in the Hegelian sense that he or she is an "unhappy consciousness, a divided and merely contradictory being." At the same time, the therapist offers the patient a dialectical step beyond his or her dilemma: Make a choice and thus reconcile your freedom and your necessity, your subjectivity and your objectivity, your individuality and your universality.

This formulation is the core of the treatment program. If the patient is hypnotizable, after her trance capacity is determined, she is taught a self-hypnosis exercise that incorporates a review of the dialectical formulation every 1–2 hours. Further discussion with the patient centers around the theme of choice among real alternatives. It also contains an exploration of the self-defeating nature of telling oneself not to do something. This pure negation merely affirms the importance of the habit. The technique is rather to affirm oneself and therefore naturally change the habit.

Thus, the patient affirms that she is in the process of changing a habit, overcoming a phobia, or mastering pain. This perspective may help explain the "ripple effect" that has been noted after successful habit control in one area (H. Spiegel and Linn 1969). Many people who begin to affirm themselves by stopping smoking discover that they also lose weight, work better, and overcome old hysterical phobias without necessarily intending to do so. The message goes far beyond any given problem: You are free to relate to yourself in any way you choose, so why not choose to affirm your freedom of will? When a person stops treating herself as an object in one area, she is likely to affirm her fundamental relatedness in other areas as well. The person

is not depriving herself of gratification and may even be exhilarated to discover that she is finally treating herself as a person.

These gains may also have interpersonal consequences. A crucial aspect of Kierkegaard's thinking that relates to this therapy is that to treat oneself as a person, one must treat others as persons as well. To treat others as objects is to attempt to reduce them to the status of objects, which is despair. A good word for this objectification is *manipulation*, a term often applicable to human interaction on any level. To the extent that a person treats himself less like an object, he is less likely to treat others as objects.

Conclusion

The restructuring technique formulates, in simple terms, the essence of a dialectical conflict and then offers the patient a choice. The patient comes to see him- or herself as neither absolutely bound nor absolutely free but rather as having an opportunity to affirm his or her freedom to choose. This opportunity in therapy is an occasion to move toward resolution of the blind allevs of pure objectivity and pure subjectivity. It is an attempt to integrate the significance of behavioral change with an understanding of the subjective meaning of the act. Pure analysis does not suffice, and pure behavioral pressure also is not satisfactory. Understanding is used to the degree that it helps clarify the relationship of mind and body. The hypnotic mode is used to intensify focal concentration on this potential for revising one's relationship to oneself. The hypnotic mode also suggests a more comfortable integration of mind and body; the mind is active and intent as the body is floating and relaxed. Mind and body do not struggle against anxious preoccupation or physical tension. Rather, the trance state implies a capacity to synthesize that then can be used in the integration of thought and behavior.

The restructuring strategy seems particularly well suited to use with hypnosis. For people capable of a meaningful trance state (operationally, persons with an intact capacity for hypnosis), the message of relating to oneself in new ways corresponds naturally with the sense of floating and relating to one's body in a new way by means of hypnosis. The capacity for intense concentration is tapped in the trance experience, and it can work to reinforce the dialectical message.

The restructuring approach may seem to the reader like a long discussion of a short message to patients. However, one thing that clinicians using hypnosis have learned over the years is that words are important: Exactly how one phrases a treatment intervention has important consequences. There is recent evidence that, for the hypnotized patient, blood flow is reduced in different parts of the brain depending on whether the patient is instructed to reduce the sensation of pain or to reduce how much it bothers him or her (Hofbauer et al. 2001; Rainville et al. 1997, 2002). Thus, carefully conceptualizing and wording a hypnosis treatment strategy that helps patients restructure their approach to the problem, overcome it with a sense of mastery, and incorporate their new understanding into their way of living is well worth the effort.

CHAPTER 11 Smoking Control

Cigarette smoking and its sequelae constitute a major health problem in the Western world today. Since the Surgeon General's report outlined the health risks associated with smoking in 1964, unknown numbers of people have stopped smoking. Some are able to stop without professional assistance. Others are unable to stop on their own and seek further help. These people are habituated, hard-core smokers who are motivated to ask a professional for a fresh approach to quitting. Simply telling them that smoking is bad and that they should stop is not an effective solution: One can assume that all people smoking today are aware of the health risks associated with the habit. The reasons the patient started smoking have no correlation to his or her reasons for trying to stop. Studying habit change is simplified by focusing on how a person stops smoking because the reasons why a person started smoking are irrelevant and do not need to be explored.

Focusing on change without exploring a patient's history is known as *Morita therapy* and is the closest model we have in the West to Zen therapy. The inferred premise in Zen therapy is that the patient is a student who has much to learn and that the therapist (priest) is a teacher. The priest knows and lives the Zen way and that is why he is a teacher. The patient is obviously not living the Zen way; hence the symptoms that cause him or her to seek help. Because the patient is present to learn and the Zen therapist knows what to teach, why spend time listening to the patient? It is better to let the patient be quiet and listen to the therapist. In fact, in the first phase of Morita

therapy the patient is isolated in his or her room and is instructed to be quiet and prepare to learn.

Using Morita therapy, the time spent gathering the patient's clinical history is brief-less than 5 minutes. For patients who want to stop smoking, the history includes how long the patient has smoked, the average number of cigarettes smoked per day, and the high and low range of cigarettes smoked on a daily basis. Did the patient stop smoking for any long period in the past? Also, who in the household smokes besides the patient? What physical symptoms are apparent now and what events led to the patient's decision to seek help with quitting at this time? It is important to understand what convergence of events, realizations, or external pressures made the patient decide to try to stop smoking. The decision usually involves some kind of family pressure or, even more often, some experience of physical deterioration, such as shortness of breath, leg pain with mild exercise, chronic coughing, chest pains, or a warning from a physician about heart disease, emphysema, or lung cancer. During the history taking, informal scanning is done to rule out the rare patient who is at risk of decompensating into psychosis or depression.

After the history is taken, the cluster survey and Hypnotic Induction Profile (HIP) are completed. Based on the test results, the instruction phase begins. If the patient is an Apollonian personality type, the tone of the discussion is that of solving a puzzle, using the nine-point puzzle (see Chapter 5, The Person With the Problem: Apollonians, Odysseans, and Dionysians). If he or she is Dionysian, the focus is toward the emotional appeal of the body's innocence. The approach to Odysseans varies. Those with nonintact HIP profiles receive supportive advice that is geared to their attentiveness and motivation without the use of the formal trance state.

The Self-Hypnosis Exercise

After the trance portion of the HIP, provide the following instructions to the patient.

DOCTOR: You see, you were not asleep. Hypnosis is a method of concentration. It is better identified as a feeling of floating. It is like having a double focus or parallel awareness, similar to being here and alongside yourself at the same time. This enables you to

be optimally receptive to your own thoughts. The strategy that you use in this receptive atmosphere is what we take up next.

I am going to count to three. Follow this sequence again. 1) Look up toward your eyebrows, all the way up. 2) While looking up, close your eyelids and take a deep breath. 3) Exhale, let your eyes relax, and let your body float.

And as you feel yourself floating, you permit one hand or the other to feel like a buoyant balloon and allow it to float upward. As it does, your elbow bends and your forearm floats into an upright position. Sometimes you may get a feeling of a magnetic pull on the back of your hand as it goes up. When your hand reaches this upright position, it becomes for you a signal to enter a state of meditation.

(One option is to have the following section on tape. It gives the therapist a 4-minute rest and offers the message in another form.)

In this state of meditation, you concentrate on the feeling of floating and at the same time concentrate on these three critical points:

- 1. For your body, smoking is a poison. You are composed of a number of components, the most important of which is your body. Smoking is not so much a poison for you as it is for your body specifically.
- 2. You cannot live without your body. Your body is a precious physical plant through which you experience life.
- 3. To the extent that you want to live, you owe your body respect and protection. This acknowledges the fragile, precious nature of your body and your responsibility to care for it. You are, in truth, your body's keeper. When you make this commitment to respect your body, you have within you the power to have smoked your last cigarette.

Notice how this strategy puts the emphasis on what you are for, rather than what you are against. It is true that smoking is a poison and you are against it, but the emphasis is on the commitment to respect your body. As a consequence of your commitment, it becomes natural for you to protect your body against the poison of further smoking.

Observe that when you make this commitment to respect your body, you incorporate with it a view toward eating and drinking

that reflects your respect for your body. As a result, each eating and drinking experience is an exercise in disciplined concern for your body. You can, if you wish, use this same exercise to maintain your ideal weight while protecting your body against the poison of further smoking.

Now I propose that in the beginning you do these exercises as often as 10 times a day, preferably every 1 to 2 hours. At first the exercise takes about a minute, but as you become more expert you can do it in much less time.

The exercise is as follows: You sit or lie down, and to yourself, you count to three. At one, you do one thing; at two, you do two things; and at three, you do three things. At one, look up toward your eyebrows; at two, close your eyelids and take a deep breath; and at three, exhale, let your eyes relax, and let your body float.

As you feel yourself floating, you permit one hand or the other to feel like a buoyant balloon and let it float upward, as your hand is now. When your hand reaches this upright position, it becomes the signal for you to enter a state of meditation.

In this state of meditation you concentrate on these three critical points:

- 1. For your body, not for you, smoking is a poison.
- 2. You need your body to live.
- 3. You owe your body respect and protection.

Reflect on what these statements mean to you in a private sense, then bring yourself out of this state of concentration called selfhypnosis by counting backward in the following manner.

Now, three, get ready. Two, with your eyelids closed, roll up your eyes (and do it now). And one, let your eyelids open slowly. Then, when your eyes are back in focus, slowly make a fist with the hand that is up and as you open your fist slowly, your usual sensation and control return. Let your hand float downward. That is the end of the exercise, but you retain a general feeling of floating.

(End of tape.)

(The patient is now out of the formal trance state and his or her eyes are open.)

DOCTOR: This floating sensation signals your mind to turn inward and pay attention to your own thoughts—like private meditation. Ballet dancers and athletes float all the time. That is why they concentrate and coordinate their movements so well. When they do not float, they are uptight and do not perform as well.

Now I am going to review the basic principles of the strategy, and then we will go back to the exercise so you will know it before you leave. You do this exercise every 1 to 2 hours. Each time it takes approximately 20 seconds. Your body is entitled to 20 seconds every 1 to 2 hours, and during this 20-second period you let the world take care of itself and you pay attention to this issue between you and your body. Making use of this extra receptivity, you now re-imprint the three points. Notice that this is not a scare technique, but rather a reminder of two important facts: 1) For your body, smoking is a poison, and 2) you need your body to live. The third point is the commitment: To the extent that you want to live, you owe your body respect and protection. Shift back to your usual awareness and go about doing what you do. This is like reinforcing a program in a computer. To date, the best computer ever made is the human brain.

If I had my way, I would ask you to spend the next week living in a tobacco shop to emphasize the point that the issue is not the presence of tobacco, but rather your private commitment to your body even in the presence of tobacco. Anybody can stop smoking if you lock him in a room and don't give him tobacco, but that in no way internalizes the change. You know that you are internalizing the change when even in the presence of tobacco you decide to give priority to your body.

The biggest mistake that you can make in this situation is to tell yourself that you must not smoke. That is precisely the wrong approach. That is like telling yourself, "Don't have an itch on your nose." What happens if you concentrate on not having an itch?

PATIENT: You get an itch on your nose.

DOCTOR: Try this one, "Don't think about purple elephants." Or, "Don't think about swallowing." Free people don't like to be told "don't." Use that knowledge to find a strategy that will help you stop smoking. Focus on the commitment you have made to respect your body rather than your commitment to stop smoking. If you

constantly remind yourself not to smoke, you will inevitably want to smoke.

At this point with Apollonians, present the nine-point puzzle as shown in Figure 10–2 (see Chapter 10, Restructuring). After the patient attempts to solve the puzzle and either succeeds or is shown the answer, he or she is told the following:

DOCTOR: Staying within the system is called first order logic, with only two options such as walk, don't walk; smoke, don't smoke. This does not solve the problem. It keeps you trapped into fighting against yourself. Adding a third option is called second order logic, which allows you to have more control by going outside the old system. Instead of focusing on smoke, don't smoke, you choose to see yourself as your body's keeper by offering your body respect and protection. This way you can resolve the problem without saying "don't."

For Dionsyians and most Odysseans:

DOCTOR: Now, you can sharpen your focus on this if you look at yourself in a double sense: There is you and there is your body. You are your body's keeper, and your body is your physical plant. There is something precious and helpless about your body, similar to a baby. When you put poison into your body, it can do nothing but accept it and make the best of it. But when you realize that you are the one putting the poison there, you have some questions to ask yourself. Are you for your body or are you not? Are you for living or are you not? If you are not for living, keep on smoking. But if the idea of living is still enticing, then you have an obligation to give your body the respect that it deserves.

For all personality types:

DOCTOR: What you are learning here is in essence an art form. It is the art of learning how to control an urge. And in that connection, there is a basic principle: If you want to control an urge, don't fight it. If you fight it, you only make it worse than it already is. But what you can do is to ignore it. And you can ignore it this way: When the urge to smoke occurs, admit it. But at the same time, acknowledge that you have a commitment to respect your body. You now have two urges at the same time: the urge to smoke and the urge to respect your body. Lock them together. If you emphasize one, you have to ignore the other. If you choose to emphasize the commitment to your body, then you must simultaneously ignore the urge to smoke. There is an axiom of human behavior that goes like this: any facility or any urge—biological or psychological—will eventually wither away if you repeatedly do not satisfy it and ignore it. This is true even for something as basic as muscles. Do you know what happens to muscles if you don't use them?

PATIENT: Yes.

DOCTOR: Atrophy. The same thing is true with urges, even urges that are biologically rooted. For example, many people are privately skeptical of the celibacy of the Catholic clergy. But the impressive truth is that those nuns and priests who take their vows seriously are celibate. Once they get through a transition period, they no longer have sexual urges. The same is true for another urge that is biologically rooted, hunger. When Ghandi went on his 40-day fast, by the fifth day he observed that although he was weak, he was no longer hungry. Dick Gregory, Cesar Chavez, and thousands of soldiers in combat all over the world have described that same lack of hunger. When soldiers are found after several days without supplies, the last thing they are interested in is food. They are so absorbed in more important things, such as not getting killed or captured, that often they have to be reminded to eat.

Now, there is a lesson here. If urges that are biologically rooted wither away by being ignored because your emphasis is elsewhere, certainly an acquired habit like smoking will also wither away if you learn to ignore it by emphasizing this commitment to respect your body. However, if you antagonize yourself by saying, "Don't smoke," or if you tease yourself by cutting down instead of stopping outright, then you are in trouble. To cut down means that, although you are smoking less, you are being teased into continuing to smoke. Whereas if you channel your energy into reaffirming your commitment to respecting your body, any urge to smoke becomes locked into this momentum, and you will be able to ignore the urge rather than fight it. That is the principle of the exercise.

Now, I'm going to do the exercise, and I want you to watch me. Then I will ask you to do it again. After that, I will show you a camouflaged way of performing self-hypnosis so that even in the presence of others you can do it without attracting attention. But this basic way assumes that you have privacy. In privacy, it goes

like this. You sit or lie down. To yourself, you count to three. One, look up; two, close your eyes, take a deep breath, and exhale: three, eyes relaxed, body floating, let one hand float up like a balloon. In this position, imagine yourself floating and to yourself repeat the three points: 1) For my body smoking is a poison. 2) I need my body to live. 3) I owe my body this respect and protection. Reflect on these statements. Then, three, get ready; two, with your evelids closed, roll up your eyes; one, open slowly, fist open, down, and that is the end of the exercise. Got it? You do it now, and I will give you your directions. All right. One, look up; while looking up, two, close your evelids and take a deep breath; three exhale, eyes relaxed, body floating, and let one hand float up just like a balloon. In this position, imagine yourself floating and at the same time you repeat to yourself the three points. Although ordinarily you will say them to yourself, on this occasion we will do it aloud. Repeat each point after me. For my body, smoking is a poison.

PATIENT: For my body, smoking is a poison.

DOCTOR: I need my body to live.

PATIENT: I need my body to live.

DOCTOR: I owe my body this respect and protection.

PATIENT: I owe my body this respect and protection.

DOCTOR: Reflect on what this means to you in a private sense. Then, bring yourself out of this state of concentration this way. Three, get ready; two, with your eyelids closed, roll up your eyes, and do it now; and one, let your eyelids open slowly. Now, when your eyes are in focus, slowly make a fist with the hand that is up, open your fist slowly, let it float, and that is the end of the exercise. I will give you those three points in print later, as a reminder.

All right. Now, suppose you want to do the exercise and you don't have privacy. You camouflage the self-hypnosis by making two changes to the exercise we just performed. First, close your eyelids before rolling your eyes up so that the eye-roll is private. Second, instead of your hand coming up like this [forearm floating upward], let it come up like this [hand to forehead]. So to an outsider it looks like this. Watch me [raise hand to forehead]. For my body, smoking is a poison. I need my body to live. I owe my body this respect and protection. Who would know that you're doing the exer*cise?* In 20 seconds, you shift gears, establish this extra-receptivity, re-imprint the three points to yourself—and shift back out.

By doing the basic or camouflaged exercise every 1 to 2 hours, you establish a private signal system between you and your body so that you are ever alert to this commitment to respect your body. When your hand reaches out for a cigarette or you find yourself wanting to smoke, admit it. But at the same time, stroke your eyebrow. This gesture activates the last time you did the exercise. It activates that third point: I owe my body this respect and protection. By stroking your eyebrow, you are again locking in the urge to smoke with the urge to respect your body. By reaffirming respect for your body, you are ignoring the urge to smoke rather than fighting it.

Now, the temptation to fight the habit is there. But, there's something deceptive about that because there are two sides to fighting a habit. On the surface, you have the illusion of feeling virtuous. Aha! I'm fighting it. But because you're fighting the habit, you're making it worse. In fact, there is an ancient Japanese Zen parable that deals with this precise phenomenon. It's a story of a jackass tied by a long rope, one end around its mouth and the other end tied to a pole. As long as it thinks like a jackass, it pulls and pulls against the rope. But all it gets is a sore mouth and a tighter knot. When it stops thinking like a jackass, it discovers it that if doesn't pull, the rope slackens. With the rope slack, it can walk around, lie down, go here, and go there. After the rope is slack long enough, even the knot gets loose. Think of your smoking habit as the jackass's rope—the harder you fight against it, the more difficult it is for you. Now, suppose you have a pet dog. What if the warning, "The Surgeon General has determined that this food is dangerous to your dog's health," is printed on the package of dog food. Would you give that food to your dog? Of course not. Why not show your body that same consideration?

Sometimes, things are so obvious that we ignore them. One obvious fact is that your body is innocent. Your body doesn't know that smoking is poison, but you do. When you realize that your body depends on your judgment, your sense of responsibility is sharpened. For example, when you cross a street, you take certain precautions. Have you noticed when you are supervising a child crossing the street, how much more careful you are? Do you see how natural it is to respond to the trusting innocence of a child? If you look at your body as this trusting innocent part of you, do

you see how natural it can be to take a position of respect and protection toward your body?

Now, in essence, what you're learning here is this: Instead of fighting cigarettes, take an outside point of view and treat your body as a trusting, innocent living creature that depends on your judgment. Do you see how different that is from saying, "Don't smoke"?

PATIENT: Yes.

DOCTOR: You are radically changing your point of view toward your body and radically changing your smoking behavior. But you are doing it in an atmosphere of an affirmation experience instead of in a fight. That's it. I'm going to give you a copy of those three points and a card and ask that you send the card back in about a week so that I can learn how you are doing.

After the dialog is ended, the patient is given an opportunity to ask questions, and the session is over. The entire procedure usually requires one 45-minute session.

Follow-Up Data*

In a 6-month follow-up study of 615 cases in which patients were treated with one session of self-hypnosis, we obtained a 44% return rate in response to the questionnaires, and 121 of these patients reported that they were still not smoking after 6 months. If we assume that all of those who did not return the questionnaire resumed smoking, 20% of the patients sampled were not smoking 6 months after one session. This method of data analysis undoubtedly makes for a certain percentage of false-negative reports. Kanzler et al. (1976) found that 75% of their subjects who responded to a mailed questionnaire were not smoking. Telephone follow-up to the nonresponders revealed that 27% of them were not smoking. Based on Kanzler's results, one can estimate that perhaps one-fourth of nonresponders are still not smoking. However, in view of the amount

^{*}Some of these data have been presented elsewhere in more detail (H. Spiegel 1970).

of speculation necessary, a more conservative evaluation of the results is needed.

The single-session treatment approach is the briefest intervention reported using hypnosis. It has been reviewed in the literature. Nuland and Field (1970) suggested that further treatment sessions in selected cases might improve the treatment outcome. Wright (1970) commented on the importance of placing the responsibility for the treatment result on the shoulders of the patient. Perry and Mullen (1975) used the three-point self-hypnosis strategy described in this chapter and obtained comparable results: 13% abstinence at 3month follow-up. They found no correlation between hypnotizability (not measured by the HIP) and smoking cessation, but when they divided the patients on the basis of high and low hypnotizability and included those who did cut down on smoking, they found a relationship between hypnotizability and positive outcome. It may be that in the low-hypnotizable group they included those who would score with soft and decrement profiles on the HIP. These individuals would likely have a poorer outcome. They noted that given the low percentage of subjects reporting abstinence from smoking, further investigation of the problem of motivation is needed.

There are numerous techniques reported that use hypnosis in the treatment of smoking behavior. Hall and Crasilneck (1970) and Crasilneck and Hall (1968) reported a four-session approach using a series of hypnotic inductions during which suggestions that craving cigarettes would be reduced and that the smoking habit was damaging to the body were introduced. When they studied a sample of 75 patients, they found that 82% of those who responded, or 73% of the total sample, were not smoking at an average of 2 years after treatment.

Kline (1970) reported on twelve 1-hour therapy sessions for stopping smoking that used hypnosis to intensify smoking deprivation, with a subsequent reduction of tension. Kline sought to couple smoking deprivation with physical relaxiation rather than tension. He reported that after 1 year 88% of the treatment group were not smoking.

Nuland and Field (1970) reported on a modification of their approach to the use of hypnosis in the treatment of smoking in which they de-emphasized hypnotic depth and concentrated on self-hypnosis. They used a flexible and unstated number of treatment sessions and reported 60% abstinence on follow-up at 6 months. If the patient was still smoking after the first session, Nuland and Field empha-

sized developing a relationship with the therapist and explorations of motivation.

Pederson et al. (1975) performed a controlled study in which they compared three groups of patients (one treated with hypnosis and counseling, one treated with counseling only, and one control group that received no therapy) who met once a week for 6 weeks. They reported that 56% of the hypnosis-with-counseling group were not smoking on follow-up at 3 months, a much better result than that for the counseling group alone (12%) or the control group (0%). This brief but well-done study is one of the few with a control group. Critical reviewers often dismiss reports of 20%–30% rates to a treatment approach as comparable to a spontaneous cure rate. It is therefore worth noting that in this study none of the members of the control group stopped smoking. Any positive response was likely due to the treatment intervention.

Watkins (1976) reported on a five-session approach emphasizing suggestions of relaxation and coping with anger. Fifty percent of the initial subjects were not smoking after 6 months.

A variety of techniques, including systematic desensitization, reciprocal inhibition, and aversion, have been used in smoking cessation treatment. Aversive techniques in general have not proved effective, although there is one field study claiming that hypnosis facilitated aversion treatment (Johnson and Karkut 1994). Various group clinic techniques and approaches using hypnosis seem quite effective. However, they cautioned that the factor of rapport with the therapist in the hypnotic situation made it difficult to compare results in what were otherwise controlled studies.

D. Spiegel et al. (1993b) reported a series of 226 smokers treated with the single-session restructuring technique with self-hypnosis described in this chapter. Fifty-two percent achieved complete abstinence in 1 week. At 1 year, 25% reported abstinence (compared to 11% of spontaneous quitters), and 23% remained abstinent 2 years later. High hypnotic capacity and living with a significant other predicted the success at 2-year follow-up. Any subject who was lost to follow-up was counted as a treatment failure. Although this meant reporting a more modest response, the results were still better than the reported rates of spontaneous quitting (Gritz et al. 1988) and pointed to factors that predict success—high hypnotizability and living with a partner.

The results of D. Spiegel et al. were confirmed in a large-scale singlesession group hypnotherapy program sponsored by the American Lung Association of Ohio. It involved use of an audiotape with instructions for relaxation, deep breathing, concentrating on a new identity as a nonsmoker, and feeling good and in control. At a range of 5-15 months after the intervention, a random sample of 452 participants (of 2,810 treated) was phoned. Twenty-two percent reported not having smoked in the previous month (Ahijevych et al. 2000). The effectiveness of hypnotic techniques involving focused attention on restructuring the meaning of the smoking habit is made more understandable by research that shows that attentional bias predicts outcome in smoking cessation (Waters and Feverabend 2000). In the Waters and Feverabend study, smokers' attentional bias was tested using Stroop interference, or their ability to name the color in which a word was written. Smokers trying to stop who showed greater Stroop interference on smoking-related words were more likely to relapse. Relapses occurred above and beyond variance accounted for by self-reported urges to smoke. Thus, the individual's cognitive involvement with the concept of smoking predicted failure to stop. Hypnosis is a cognitive technique that facilitates refocusing of attention, and it thus might well alter attentional bias by helping a person reprocess the meaning of smoking. Although it is not proved that adding hypnosis improves outcome over other behavioral techniques, it is clear that hypnosis is an efficient and effective means of contributing to smoking cessation (Berkowitz et al. 1979; Covino and Bottari 2001: Green and Lvnn 2000: H. Spiegel 1970: D. Spiegel et al. 1993b).

Conclusion

Comparing studies of smoking cessation therapies is problematic because of possible differences in patient samples. The effectiveness of various therapeutic strategies will not be firmly established without systematic study of a larger number of patients over a longer period. Clearly, short-term results can be misleading. However, taken as a group, the studies reviewed in this chapter suggest that hypnosis can be quite effective in facilitating the cessation of smoking.

It is entirely possible that a more intensive or extensive therapeutic input would result in a higher percentage of responders. It is also possible that offering a more prolonged or involved treatment tends

to select for those patients who are more committed to stopping smoking. The ultimate goal is the maximum therapeutic response to a minimum of necessary time and effort expended. It may well be that for a certain subsample of patients, subsequent sessions would be helpful at intervals after the initial restructuring. It is at least clear that a patient who has had difficulty stopping smoking in the past can be helped in one session using self-hypnosis. Given the prevalence of the smoking problem and the serious medical consequences that attend it, a public health perspective dictates using the simplest technique that can be employed most widely to help the greatest number of patients. For some patients, the opportunity to place their problem in a new perspective suffices. Others may benefit from more involved treatment, and still others may be unresponsive to any approach. Even if only one in five patients is able to stop smoking, smoking cessation therapy provides a major opportunity for clinicians to practice preventive medicine.

CHAPTER 12 Eating Disorders

Weight Control

Hypnosis has been used in the treatment of obesity to provide relaxation training, enhance a feeling of self-control, encourage physical exercise, improve self-esteem and body image, enhance motivation, and explore ambivalence about change, among other uses (Vanderlinden and Vandereycken 1994).

Our use of hypnosis in treating obesity is presented as an edited transcript of a session with an overweight patient. We present the approach in this manner to convey the clinical flavor of the interaction rather than as a prescription to be followed exactly. Good psychotherapy requires the integration of therapeutic principles with the personal style of the therapist as well as with the psychological style of the patient. This integrated technique is also modified somewhat to fit the personality characteristics of the patient, as is described.

The treatment generally occurs in one or two sessions if the patient exceeds his or her ideal weight by less than 15%. More seriously overweight patients require periodic reinforcement sessions. A brief medical and psychological history is taken, and data on marital and family status, education, and employment are gathered. The Hypnotic Induction Profile (HIP) is performed and explained to the patient, and then the patient is taught an exercise in self-hypnosis that emphasizes the concept of eating with respect for his or her body. A typical session then proceeds as follows:

DOCTOR: There are basic principles concerning eating and dieting that I will discuss with you. Then, I will show you how to do the self-hypnotic exercise for weight control, and finally, I will discuss some other guidelines. But first, here are the basic principles:

1. Choose a varied diet. It is useful each day, once you are acquainted with all of the different diet programs, to decide for yourself what you are in the mood for that day. Sometimes you
may be in the mood for a vegetable day, sometimes a high-protein day, sometimes a liquid day. Most of these diet programs are equally good, so it is all right to shift from one to the other from day to day. This gives you a chance to decide each day which one you are in the mood for, so that your diet becomes your commitment and takes on more meaning than blindly following what somebody tells you to do. The major issue is the total number of calories that you ingest in relation to your physical activity. Whether you get the calories from one kind of food or another doesn't make too much difference, as long as your basic nutritional needs are met.

- 2. Change your relationship to your body. As important as calories are, fighting calories is too narrow a focus. It is so narrow that you cannot possibly pay attention to it around the clock. To adopt a new point of view toward your eating behavior, regard today as the day on which you are radically changing your whole philosophy of life. In that context, you are changing your point of view toward your body, and as a consequence you are changing your eating behavior. By giving your concept this broad base, you can keep it with you around the clock. You are changing your philosophy of living in relation to your body and, as a result, your eating behavior.
- 3. Accept responsibility for your eating behavior. It is very tempting to blame your eating behavior on your parents, your wife, the mayor, the moon, or the tides. As soon as you see the absurdity of that, you will realize that of all the things you do in life, there is nothing for which you are more clearly 100% responsible for than your eating behavior. Reflect on the fact that most of the things you do in life have to take into account other considerations or other people, but in your eating behavior you are in business for yourself.
- 4. Prepare for ideal weight. While you are losing weight, it is mandatory that you learn to reacquaint yourself with your body, so that you prepare yourself to meet your body at your normal weight. It will be like meeting a long-lost friend and, having prepared yourself for the meeting, you will be in a position to hold on to that friendship indefinitely. If you do not prepare yourself to meet your body at your normal weight, then even if you lose weight, you will have an eerie feeling of being like a stranger in your own body, and your weight will go right back

up. The preparation for weight loss is mandatory if you want to be successful in the long term.

The Self-Hypnosis Exercise

DOCTOR: Now with that in mind, I am going to show you an exercise. You will do this exercise every 1 to 2 hours, each time taking only 20 seconds. First, I will show you how you do it if you have privacy, and then later I will remind you of the camouflaged way of doing it. If you have privacy, it goes like this: You put one arm there and one arm there and one, look up to the top of your head; and while looking up, two, close your eyes and take a deep breath; and three, exhale, let your eyes relax, let your body float, and as you feel yourself floating, you permit one hand or the other to feel like a buoyant balloon and float upward. As it does, your elbow bends, and your forearm floats into an upright position. When it reaches an upright position, this becomes your signal to enter a state of meditation in which you concentrate on this imaginary floating and, at the same time, on three critical points:

- 1. For your body, overeating is, in effect, poison. This is just like a person's situation with water: You need water to live, but too much water will drown you. Similarly, you need food to live, but too much of this very same food, in effect, becomes poison.
- 2. You cannot live without your body. Your body is the precious physical plant through which you experience life.
- 3. To the extent that you want to live your life to its fullest, you owe your body this commitment to respect it and protect it. This concept is your way of acknowledging the fragile, precious nature of your body, and, at the same time, it is your way of seeing yourself as your body's keeper. You are, in truth, your body's keeper. When you make this commitment to respect your body, you have within you the power to so radically change your eating and drinking behavior that each eating experience becomes for you an exercise in disciplined respect for your body's integrity. Lock this concept in mind so that it becomes a posthypnotic signal that you give to yourself. Then, bring yourself out of the state of meditation in this way: Three, get ready; two, with your eyelids closed, roll up your eyes; and one, let your eyes open slowly. Then, when your eyes are back in focus,

slowly make a fist with the hand that is up, open your fist slowly, and let it float down. That is the end of the exercise.

We are going to go back to that exercise later, but before we do, I want to point out four major ways in which thin eating differs from overweight eating. Then, I will offer you two guidelines for establishing your own middle range between these extremes.

Now, to the differences:

- 1. A thin person looks at food as fuel: He fills up the gas tank and drives off. A person who is overweight fills up the gas tank, but then he sees additional fuel in the pump and he reasons like this: "Well, since it is there, I might as well take more." But since the tank is full, he sprays gas on the back seat and the front seat. Perhaps he feels a little silly and rationalizes by saying, "This is a good way to store more fuel." That's not only silly but is also dangerous.
- 2. No matter how delicious the food is, once her appetite is satisfied, a thin person regards the extra food on the plate as belonging either in the refrigerator or in the garbage can. The person who is overweight, without admitting it to herself, reasons like this: "It's a shame to put it into that garbage can: I might as well put it into this garbage can." At that point, the overweight person is abandoning respect for her body integrity without admitting it to herself.
- 3. There are two major kinds of ceremonies regarding eating: temporal and social. At mealtime, a thin person eats if he is hungry. If he is not hungry, he will skip it. If an overweight person is not hungry at mealtime, he reasons like this: "Well, I guess I don't feel hungry, but I may get hungry; therefore, I had better eat." This reasoning denies the signal from the body that it doesn't need food.

On social occasions, a thin person eats if she is hungry; if not, she will take a token bite to socialize. An overweight person reasons like this: "I don't want to make my guests uncomfortable," or "I don't want to embarrass the hostess," or "I don't want to appear like a square peg in a round hole, so I'll just eat like everybody else." Again, she denies the message from the body that it doesn't need food.

4. The fourth difference is a more subtle one, and that is the way we use our symbols or metaphors, especially our body metaphors. We all live our lives using metaphors at various times. For example, if I say to you, "He gives me a pain in the neck," you know exactly what I mean. But if somebody is bothering me and I wait until my neck muscles are so tensed up that they produce pain before I get the message, then that is taking a good metaphor too far. Similarly, we may want something of a psychological or social nature; we may want it so much that we formulate it privately in terms of having a hunger or thirst for it. But the desire can become so vivid that we feel that if we eat food, we are actually going to satisfy our desire, and that is when the deception takes place. This is the error of confusing the menu with the meal.

Now, how does all of this come into focus? It is not necessary to constantly psychoanalyze all of these factors; if we did, we wouldn't have much time for anything else. But there are two guidelines that can help you keep a sense of balance between these extremes. The first guideline is this: Always, always eat with respect for your body, because if you respect your body, you are never likely to regard it as a garbage can. The more important part of that perspective is that you avoid the biggest trap of all, which is telling yourself, "Don't eat that." Once you get caught in that trap, you are losing. Telling yourself, "Don't eat that" is like telling yourself, "Don't have an itch on your nose." Do you feel it? Or, "Try to think about not swallowing." Free people don't like to be told "don't." When God said to Adam and Eve, "Don't eat the apple," that moment was the end of Paradise. This is a basic observation about the human condition. Why not use this knowledge if you want to devise a strategy that can work? You can use this knowledge of human behavior by turning it around and realizing that it is far more effective to change habits based on something you are for. So if you approach eating this way, you will respect and protect your body. In the course of protecting your body from overeating, you can radically change your behavior, but you think of protecting your body as, "Yes, I respect my body" instead of. "Don't eat that."

The second of these two guidelines is going to surprise you: Learn to eat like a gourmet. Why a gourmet? Because a gourmet pays full attention to every swallow. Every swallow is a total encounter with food. She is aware of the touch, the taste, the smell, the temperature, and the texture of the food with such total involvement

that it is incredible how much fulfillment and enjoyment she gets out of each swallow. In fact, this whole process not only helps you radically change your eating behavior, but it brings joy back to eating again. The gourmet does not make the mistake of saying, "Oh, I swallowed that food, but I don't remember what it tastes like; I had better take another bite." The reason that a gourmet does not make that mistake is because each swallow is such a total involvement that the memory of it stays with her. She doesn't have to keep getting reinforcements of new food, because she knows fully what the experience was. The stereotype that gourmets are overweight is just not true. Most of the great gourmets of the world are either at or below their ideal weight.

Now, let's pull all of this together: You have the recurrent urge to eat and drink, and you have the urge to respect your body, which you reinforce by doing this exercise every 1 to 2 hours. Lock these two urges together until you form a psychological filter, and then ask yourself the question, "Does this intended food reflect respect for my body?" If it conforms to the program that you have committed yourself to for that day and the answer is yes, eat it and enjoy every swallow. But if the answer is "No, it does not conform to my program for the day," then by emphasizing this respect for your body, you are ignoring the urge to eat rather than fighting it. Do you see that difference?

Now, with that in mind, let's go back to the exercise. One arm there and one arm there: One, look up, while looking up; two, close your eyes and take a deep breath; and three, exhale, eyes relaxed, body floating, and let one hand float up just like a balloon. When it reaches the upright position, this becomes your signal to enter a state of meditation in which you concentrate on this imaginary floating and at the same time on the three critical points. Although ordinarily you say them to yourself, on this occasion we will do it aloud. Repeat each point after me.

DOCTOR: For my body, overeating is a poison.

PATIENT: For my body, overeating is a poison.

DOCTOR: I need my body to live.

PATIENT: I need my body to live.

DOCTOR: I owe my body this respect and protection.

PATIENT: I owe my body this respect and protection.

DOCTOR: Take a few seconds to reflect on what this means to you in a private sense. Then bring yourself out of this state of meditation in this way: Three, get ready; two, with your eyelids closed, roll up your eyes; and one, let your eyes open slowly. Then, when your eyes are in focus, slowly make a fist with the hand that is up, open your fist slowly, and let it float down; that is the end of the exercise. I will give you those three points in print as a reminder, and you will notice that the concept is similar to the smoking exercise but that it has an intermediate step, which involves asking yourself the question "Does this intended food reflect respect for my body?" which means, does it correspond to your program for the day? That is, you make a decision regarding whether it is for your health or not. The guideline has to be your choice of diet for the day.

Now, suppose you don't have privacy. You camouflage the exercise with two changes. [The therapist demonstrates.] First, you close your eyes, then roll your eyes up so that the eye-roll is private; second, instead of your hand coming straight up, let it come up and touch your forehead. To an outsider, it looks as though you may have a headache. Then, repeat to yourself: "For my body, overeating is a poison. I need my body to live. I owe my body this respect and protection." In 20 seconds, you shift gears, establish your sense of receptivity, reimprint the three points to yourself, and shift back out again. By doing the basic or camouflaged exercise every 1 to 2 hours, you establish a private signal system between yourself and your body so that you are ever alert to this commitment to respect your body. If your hand reaches out for food or drink or if you find vourself wanting to eat, admit it. At the same time, do this: Stroke your forehead. This gesture activates the last time you did the exercise, especially that third point: "I owe my body this respect and protection." By doing that, you are again psychologically locking in the urge to eat with the urge to respect your body. By forming the psychological filter, you ask yourself the question "Does this food reflect respect for my body?" If it conforms to your program for the day, the answer is yes. Then, eat it and enjoy it. If the answer is no, then—instead of fighting the food—by emphasizing respect for your body, you ignore the food.

The temptation to fight food is there, but it is deceiving. On the surface you have the illusion of feeling virtuous: "I'm fighting it." But

beneath the surface, you are making food a worse enemy because you are fighting it. There is an old Japanese Zen parable about a jackass tied by a long rope, one end around its mouth and the other end tied to a pole. As long as it thinks like a jackass, it pulls and pulls, and all it gets out of that is a sore mouth and a tighter knot. When it stops thinking like a jackass, it discovers that it doesn't have to pull on the rope and that if it doesn't pull, the rope slackens. With the rope slack, the jackass can walk around, lie down, go here, go there—and when the rope is slack for a while, even the knot gets loose.

Do you have a pet dog?

PATIENT: Yes.

DOCTOR: Suppose your veterinarian says to you, "The dog is too fat, and if you want it to grow up and be a good pet, you have to control its food." Would you do it?

[Patient nods yes.]

DOCTOR: Why not show your body the same consideration you show your dog? There is something startling about that thought, because it brings into focus some things that are so obvious that we ignore them. One obvious fact is that your body is innocent. Your body does not know how to deal with your metaphors and desires. You know how, but your body doesn't. Your realization that your body has this trusting innocence and depends on your judgment sharpens your sense of responsibility. For example, when you cross a street, you take certain precautions. Have you noticed how much more careful you are if you are supervising a child crossing the street? You see how natural it is to respond to the trusting innocence of a child. If you look at your body as this trusting, innocent, living creature that depends on your judgment, you see how natural it can be to take this position of respect and protection toward your body. What you are doing is so radically changing your philosophy of living that you are taking a new point of view toward your body. You are viewing it as this trusting little creature that counts on your judgment, and as a consequence of that, you are changing your eating behavior rather than fighting calories.

Now, I am going to give you those three points as a reminder. Before you go, would you like to have a visual preview of what you can look like when you have lost your excess weight? The patient is given an opportunity to view himself in a modern variant of the old fun-house mirror that makes him look much more slender. This activity usually ends the session on a hopeful and amusing note.

Summary of Self-Hypnosis Exercise

In this session, the patient has had an opportunity to put an old problem—that of his relationship to his body—in a new perspective. He has been urged to use his trance capacity as a way of concentrating on this new relationship, just as the trance experience itself may have provided an opportunity for him to experience his body in new ways. He has been urged to eat with respect for his body and to eat "like a gourmet." He has been advised to plan an appropriate diet day by day and to view additional food as a poison for his body. This directive makes it possible to dissociate an urge to eat for biological or symbolic reasons from the necessity of acting on that urge. He then has the choice of making use of this information as he wishes. Therapy is an opportunity that leaves a patient with clarified choices and the awareness that he is making them.

The approach described in this chapter was tailored for an Odyssean patient. If a patient scores lower on the HIP, more emphasis is placed on the cognitive aspects of the treatment (e.g., the idea of taking a new approach to an old problem, the use of the nine-point puzzle, the dialectical aspects of the mind-body relationship). The patient is encouraged to work at the exercises more, which appeals to an Apollonian cognitive framework and recognizes his or her lower trance capacity.

A Dionysian is encouraged to use the self-hypnosis exercise religiously every 1–2 hours, and the more emotional aspects of the exercise are emphasized. Such patients are often particularly struck by the analogy between their body and an infant who must take in anything given to him or her, even if he or she is damaged by what is given. Dionysians who are parents often refer quickly and easily to feelings they experienced while raising their children. This emotional connection is quite helpful in communicating the message of respect for one's body.

In our experience, hypnotizability itself is not a major factor in follow-up success. In general, those patients who are already within 10% of their ideal weight perform best in the long run.

Follow-Up Data on Weight Control

We begin our discussion of follow-up data on obesity control with a brief review of pertinent studies conducted in the last four decades. Obesity is an endemic disease in the affluent culture of the United States, and interest in its control has grown markedly as evidence has mounted that excess weight is related to damage of the cardiovascular system. In a detailed review of obesity and its treatment, Stunkard (1975) estimated that within 4 years, the behavior-modification approach had resulted in a doubling of treatment effectiveness. Many aspects of the program he used overlap with our self-hypnosis technique-for example, the emphasis on enjoying the taste of food. However, his program incorporated these elements into a more extensive and intensive treatment program, with detailed record keeping of food ingested and a point system of rewards for good behavior. Stunkard also pointed to promising work done by self-help groups such as TOPS (Take Off Pounds Sensibly) and commercial groups such as Weight Watchers in influencing a large segment of the population.

Stuart (1967) made an important contribution in demonstrating the effectiveness of behavior-modification approaches, and he reported a ripple effect as well (see Chapter 10, Restructuring). Although he found no symptom substitution, he did find that that some patients improved their social relationships and others adapted the weight-control regimen to stop smoking.

There are several clinical reports in the early literature of the successful use of hypnosis in the treatment of obesity (Crasilneck and Hall 1975; Glover 1961; Hanley 1967; Oakley 1960; H. Spiegel and D. Spiegel 1978; Stanton 1975; Wick et al. 1971). Brodie (1964) reported the successful use of the concept of enhancing the subject's enjoyment of food while he or she is losing weight, mingled with an analogy between fat and cancer. These approaches required four or more visits and generally involved a suggestion that appetite would decline, with an emphasis on the subject's enjoying the taste of food. In an intriguing clinical article, Erickson (1960) described three successful cases. He used hypnotic time distortion to extend the pleasurable experience of eating for one patient, and he used paradoxical techniques to give the other two patients the feeling of defiant overeating as they actually ate less.

More recent studies suggest modest effectiveness of hypnosis for weight control, especially among subjects close to their ideal weight. Barabasz and Spiegel (1989) used hypnosis with 45 subjects according to the protocol described in this chapter and a food aversion protocol in a randomized trial comparing hypnotic intervention to self-management training. The hypnotic interventions were significantly more effective, and results were correlated with hypnotizability scores on the Stanford Hypnotic Susceptibility Scale, Form C. In a randomized trial of hypnosis in the treatment of 60 overweight patients with obstructive sleep apnea, Stradling et al. (1998) found that hypnosis for stress reduction was more effective than dietary advice in promoting long-term weight loss (an average of 3.8 kg). This use of hypnosis was nonsignificantly more effective than the cognitive restructuring approach described in this chapter. Overall results were significant but modest. In a metaanalysis, Kirsch et al. (1995) concluded that the addition of hypnosis contributed significantly to the maintenance of weight loss, although a later reappraisal corrected for some errors and concluded that the effect size was only modest at best (Allison and Faith 1996). However, given the generally dismal results of behavioral treatments for obesity, even a modest effect size is noteworthy.

One interesting potential mechanism of the effectiveness of hypnosis is the activation of feelings of satiety in the brain. Neuroimaging of obese and nonobese subjects indicates that satiety in nonobese subjects is associated with activation of the prefrontal cortex (Del Parigi et al. 2002). Given the evidence of specific dopaminergic activation with hypnosis (D. Spiegel and King 1992) and the widespread dopaminergic innervation of the frontal lobes, hypnosis may be especially effective at influencing activity in the frontal inhibitory neural networks.

Clearly, there is much overlap between behavioral and hypnotic techniques in the treatment of obesity. Elements of our restructuring approach have been successfully used under both rubrics. The concept of hypnosis as a *facilitator* is extremely important in understanding its use. The process of identifying trance capacity and using that capacity to launch a patient on a self-generated course of eating with respect for his or her body makes minimal demands on a therapist's time. More extensive behavioral techniques may be more useful for patients who are not hypnotizable, do not respond to a one-session approach, or require a more authoritarian and structured treatment strategy.

Bulimia Nervosa

The use of hypnosis for the binge-purge syndrome makes special sense in light of evidence that individuals with bulimia tend to be highly hyp-

notizable and often report feeling as though they are in a dissociated state when they engage in their compulsive eating behaviors (Covino et al. 1994; Kranhold et al. 1992; Pettinati et al. 1985). Thus, persons with bulimia are likely to have the requisite hypnotic capacity for treatment, and their disorder may represent in part an uncontrolled spontaneous use of hypnotic-like phenomena (Vanderlinden et al. 1995).

Hypnotic treatments that have been effective for bulimia include the use of suggestions that patients connect the urge to binge with an awareness of negative consequences to the body and self-esteem. Also, positive suggestions regarding an improvement in self-esteem, physical energy, and well-being when the binging and vomiting are stopped can be used effectively (Vanderlinden and Vandereycken 1990). Efforts to explore intrapsychic and interpersonal implications of the eating disorder and to consolidate gains are also helpful in some cases. As with the treatment of other eating disturbances, helping the patient focus on her relationship to her body, seeing her body as separate from but dependent on her, and linking her commitment to respect her body with the natural protective urges she feels toward dependents (e.g., children, pets) can be helpful.

Anorexia Nervosa

In essence, the same strategy that is used for diet control applies to anorexia nervosa, with some additional considerations. In the first place, use of the profile is critically important to differentiate the kind of person who has anorexia. If the profile is soft or decrement, the odds are that the basic condition is schizophrenia or a serious character disorder, in which case the anorectic symptoms are secondary to the treatment modality for containing the primary psychiatric illness. In our clinical experience, anorexia nervosa is a disorder for which differential diagnosis, aided by the score on the HIP, is especially important. For borderline patients or patients with schizophrenia with decrement profiles, the disturbed eating pattern represents a somatic delusional system acted out, and psychotropic medication along with structured milieu and rehabilitative treatment is of great importance (Bruch 1973).

If the profile is intact, and especially if it is mid-range or high, then the instructions to the patient are basically as follows: 1) Overeating and undereating are insults to body integrity; in effect they become a poison to the body; 2) You need your body to live; and 3) To the extent that you want to live, you owe your body this respect and protection.

Among patients with anorexia scoring high on the profile, anorexia is more consistent with a diagnosis of histrionic personality disorder than with one of schizophrenia. These patients may be using their eating disorder as a dramatic conflict with other people in their lives or as a way of acting out a message from members of their family that they do not deserve to live. The somatic consequences can be serious in both cases; however, for the latter group, a structured psychotherapeutic intervention (along the lines discussed in Chapter 19, The Grade 5 Syndrome: Special Considerations in Treating the Dionysian, for the highly hypnotizable person) is appropriate. Exploring the patient's living situation is very important in the event that the patient is acting out a message that is being conveyed by family members. If significant depression is a factor, antidepressant medication can be of adjunctive benefit. It is especially important to treat the affective disorder, if one is present, and then to take into account any secondary gain and loss factors in the patient's environment.

Thus, we add to the traditional treatment for anorexic patients an emphasis on sorting out those for whom the affective component rather than the thought disorder is of primary importance and then using the techniques described in Chapter 19 for treating the highly hypnotizable person. The following case example illustrates the use of this approach.

M.L. was a 31-year-old divorced woman who requested help with hypnosis for weight control. She complained of episodic binge eating; several medical problems, including lupus; and a history of some social isolation for the preceding 3 years. It quickly became obvious, however, that she was seriously underweight rather than overweight, and that her preoccupation with occasional episodes of excessive eating camouflaged her more serious problem of damaging herself by undereating. She had a history of amenorrhea for the preceding 3 years, and it turned out that she was also seriously depressed. Her profile was a 3 soft, consistent with this depression.

She was taught an exercise that emphasized helping her learn to eat with respect for her body and that included cutting down on the eating binges but eating more regularly. She was also prescribed a tricyclic antidepressant. Within a month,

her depression began to lift, and she began to examine some unresolved issues in the break-up of her former marriage and in coping with her parents. At the 6-month follow-up, her weight was in the normal range, her depression had lifted considerably, and her social isolation had diminished.

Thus, hypnosis has a peripheral and differential diagnostic application in this serious form of weight disturbance. Techniques such as cognitive restructuring, ego strengthening, and suggestions for recovery can contribute to management of anorexia, but they are not a solution in themselves (Torem 1992). The main use of hypnosis in the treatment of anorexia is to help sort out any serious underlying psychiatric disorder and especially to help identify the important field forces that influence outcome in a subgroup of these patients who are highly hypnotizable.

CHAPTER 13

Anxiety, Concentration, and Insomnia

Anxiety and Concentration Problems

Anxiety can be understood as a fear of nothing, a vaguely defined but immobilizing sense of distress. The very lack of definition of the source of the discomfort enhances the patient's sense of helplessness and desire to avoid the feeling. The challenge is to convert anxiety into fear and to give the fear a focus so it can be treated, in the same manner that converting depression into sadness can help depressed individuals work through sources of their sadness so that the erosion of their self-worth and sense of hopelessness and helplessness are reduced.

From the point of view of therapeutic treatment strategy, we view anxiety and concentration difficulty as related aspects of the same overall problem. Both involve some pathological distraction of attention from necessary day-to-day functions, and both involve a negative feedback cycle between psychological preoccupation and somatic discomfort, a kind of "snowball effect" in which subjective anxiety and somatic tension reinforce each other. Someone who notices an increase in heart rate, sweating, or tension in their abdomen is likely to read the somatic signals as indicators of danger even when no danger exists and respond with increased anxiety. The increased anxiety can in turn trigger further somatic response, and so the cycle repeats. Hypnosis can be especially helpful, not only because of its ability to reduce anxiety and induce relaxation (Wertz and Sayette 2001) but also because of the dissociative element of hypnosis that facilitates separation of the psychological and somatic components of anxiety. There is evidence that hypnosis is as effective at reducing anxiety as 1 mg of alprazolam, at least among college student populations (Nishith et al. 1999). Garvin et al. (2001) have also found that the antianxiety effects of hypnosis in

such populations are similar to those of autogenic training and quiet rest. It is particularly important to use the dissociative capacity of the patient to help separate his or her focal attention, even that devoted to anxiety-related issues, from somatic sensations of discomfort and restlessness. Because the problems of anxiety and concentration difficulty are so closely related, the treatment strategy for them is virtually the same.

It is particularly important to provide the patient with a tool for interrupting the snowball effect of developing anxiety. Very often, an individual who has periodic attacks of anxiety becomes more and more fearful of the cycle after an initial signal that something is wrong. The patient may become preoccupied with a situation that makes him or her anxious and then begin to recognize the physical concomitants of anxiety: tightness of the stomach, shortness of breath, paresthesias, or other signs. The patient then begins to respond to the physical signals with worry, which in turn provokes even more physical discomfort. This sets up a feedback cycle, which escalates into a major and immobilizing state of anxiety.

During the treatment session, a history is taken, and in particular some effort is made to elicit information about the psychological or social setting in which the anxiety attacks are likely to occur. The patient is administered the Hypnotic Induction Profile (HIP). Presuming the psychiatric history, mental status examination, and results of the HIP indicate that the anxiety is of a moderate type and that the patient has intact trance capacity, the patient is instructed to put himor herself into a hypnotic trance, and then is told:

While you imagine yourself floating, in your mind's eye visualize a huge screen. It can be a movie screen, a television screen, or, if you wish, a clear blue sky that acts as a screen. On that screen you project your thoughts, ideas, feelings, memories, fantasies, and plans while you float here. You establish a clear sense of your body floating here while you relate to your thoughts and ideas out there. Once you have established the screen, you can further separate out a main screen and a split screen or, if you wish, you can insert a screen within the main screen. Allow the spontaneous flow of thoughts and feelings to continue as they proceed onto the main screen, but exert your own selectivity by focusing aspects of the main screen onto the split screen. By focusing on the split screen, you now can engage in the kind of technical virtuosity of fastforward, fast-backward, slow-motion forward, slow-motion backward, or you can freeze a frame and examine it carefully. You can even use a psychological zoom lens in which you focus with great detail on an aspect of something that occurs on the split or insert screen.

Using the screen visualization technique, you now have several options. The first one is that as you learn new material, you can put yourself in a trance state and visualize this new material on the screen, especially the split screen. Then as a practice session later, you can reinstitute the trance state and learn the art of retrieving the memory of what previously was imprinted on the screen. By doing this in a systematic way, you accumulate and process those feelings and thoughts on the screen. At the same time, you have a practice effect of learning the art of retrieving what was there before. While doing that, it is even possible to use a retrieval experience of whole memories that you can then focus on at will.

When your main goal is to focus on anxiety control, the emphasis in this training is to concentrate on the floating, floating, floating. Sometimes you can make it more vivid by imagining that you're floating in water. Or if it's more helpful, imagine that you're like an astronaut floating above the field of gravity. The focus on floating leads to an inevitable sense of muscle relaxation; when your muscles are more relaxed, anxiety itself is reduced. It is very difficult to instruct the muscles to relax through intellectual means, but to imagine yourself floating is a direct signal to your muscles to shift into a state of buoyant repose. An indirect consequence of this buoyant repose is that thinking and feeling out there on the imaginary screen happen with greater ease.

When the focus is on concentration, floating is still the theme, although the main emphasis now is on imprinting new feelings, new thoughts, and new content onto the screen, especially the split or insert screen. Have practice sessions in the beginning, maybe four or five times a day, to learn the art of retrieving what was imprinted on the screen. The art form is in essence a two-way arrangement in which you learn to impose the imprint of the thought or feeling on the screen, and at the same time become equally comfortable with reestablishing the screen so that retrieval is available as the floating constantly goes on. It is especially helpful to use the slow-motion and zoom lens technique in retrieval processes, to be sure that the art of remembering on command, in response to questions, or in stress situations occurs by training and not as a surprise.

Learning how to remember on command is a very useful preparatory experience for anticipated examinations, as in the following example.

K.U. was a 44-year-old well-trained psychiatrist with 4 years of psychoanalytic training who had failed her board examinations 2 years in a row. This was especially disturbing because she was well informed and her colleagues knew her as a competent psychiatrist. Yet something happened in the examination process that led to blocking and intellectual paralysis. For use in that setting, she inquired about learning self-hypnosis to discipline her concentration. She was taught the procedure for self-hypnosis after determining that she had an intact grade 2-3 HIP profile. She responded immediately after the first practice session with this observation: "It's a nice, relaxing sensation-something I have not experienced in a long while." She practiced this exercise approximately 10 times a day. In fact, a week or so later she made a phone call to check up on the procedure and to be sure that she was doing it correctly. She conscientiously prepared for the next board examination by imprinting the review information on her private imaginary screen. After a 4-month preparation period using the exercise, she again took the examination and passed. She successfully passed the oral examination as well. A year after the treatment session, she wrote the following letter:

It is probably unforgivable that one receive a thank you a year after the event. But one of my first thoughts on learning that I had passed Part 2 of the boards in psychiatry was to thank you. The trial session of hypnosis last October helped me considerably with both rest and study. My single "buoyant" left arm was, I think, a great asset.

Patients are taught the self-hypnosis exercise and are given instructions to practice it every 1–2 hours during the first few weeks, until they become confident of their own ability to invoke this relaxed, dissociated state whenever necessary. It is particularly important to instruct patients with anxiety to use the exercise every time they feel an anxiety attack coming. The exercise gives them a sense of something to resort to at a time when they are prone to feel especially helpless, and it facilitates their development of a sense of mastery over the symptom.

The treatment strategy is designed not merely to counter a sense of anxiety or distraction in concentration but to provide the patient with an alternative strategy for working through psychological problems or for doing intellectual work. In particular, the patient with anxiety is encouraged to use the trance experience of thinking with the screen to work through psychological problems as he or she maintains a sense of relaxed floating in his or her body. It is also helpful to have the patient practice visualizing situations on the screen that provoke anxiety: Have the patient freeze the action on the screen when he or she begins to sense the physical signs of anxiety and reestablish a sense of floating before proceeding with the scene on the screen. This method enables a patient to contain his or her somatic responses so that he or she can more clearly think through the psychological pressures and conflicts with which he or she is coping. At times, having the patient visualize anxiety-provoking situations provides an opportunity to further explore possible insight-oriented explanations of what is causing the anxiety. The following case example illustrates this point.

U.L. was an accomplished accountant who was highly respected by his peers and employer. He went into analysis and, despite efforts at working through many of his private problems in analysis over a 4-year period, failed the CPA examinations six consecutive times. At the suggestion of his analyst, he asked to learn about the possibilities of using selfhypnosis to prepare for the next examination. He profiled as an intact 1–2 on the HIP. He was taught the screen technique, and he practiced it diligently. He even looked forward to taking the next examination. When the examination was over, he had a sense of elation that at last he had learned the art of concentrating and responding directly to the questions. However, that evening he was shocked to realize that he had totally overlooked an entire question on the examination. The skipped question resulted in yet another failure, which became a major issue in his analytic work for several months as he realized that he had unconsciously sabotaged the examtaking process by overlooking the question. He explored the

significance of the obsessive style of undermining even a newly acquired talent and of feeling the exuberance of mastering a new technique at the same time.

Much of this exploration resonated well with other issues that had been previously dealt with in his analysis. The next time he took the examination, he was able to pass it not only successfully but with a high grade. Mastering this problem, recognizing the trap that he set for himself, and understanding its meaning in relation to other events in his life led to the termination of his formal analysis. On follow-up 8 years later, he was practicing successfully in his profession.

In this case, hypnosis worked well in tandem with psychoanalytic therapy. There came a point at which the patient's premises needed to be challenged before he could pass the examination. His experience with self-hypnosis and his subsequent performance on the sixth examination proved to him that he could indeed pass it, which sharpened the focus on the question, "Since I can, why won't I pass the exam?" This issue was then fruitfully explored in analysis, and he did finally allow himself to succeed.

The technique for using self-hypnosis in dealing with anxiety and concentration difficulties is basically the same regardless of the HIP score, as long as it is in the intact range. As is true with other problems, it is often helpful to emphasize the intellectually intriguing aspects of the approach with Apollonian personality types, discussing the nature of dissociation and the mind-body question and emphasizing the importance of discipline in performing the exercise regularly. For Dionysians, the compliance aspects are emphasized, and the patient is encouraged to explore his or her newly found facility at bringing on a sense of floating. All patients are encouraged to use the floating state creatively, to meditate on issues that concern them, and to use it to think through difficult situations. They are also taught to view their anxiety or concentration difficulties as a message: not to be frightened or overwhelmed by their difficulties, but to use them as an occasion to examine what is bringing about the anxiety. In the last example, anxiety was an important message to the patient about his self-destructive impulses. In other instances, anxiety may have more shallow roots and simply reflect a habitual or socially reinforced response to a difficult situation. In any event, the patient is encouraged to use the anxiety experience as an occasion to widen his or her sense of mastery.

Brief Anxiety Control Method: The Screen Technique

The screen technique introduced in the preceding section teaches patients how to face and deal with stressors that complicate their anxiety while controlling their somatic response to it. It frees them to use focused concentration to expand their repertoire of responses, thereby feeling less helpless in the face of the anxiety. Say to the patient:

Get as comfortable as you can. On one, do one thing: look up. On two, do two things: close your eyes slowly and take a deep breath. On three, do three things: let the breath out, let your eves relax but keep them closed, and let your body float. Then let one hand or the other float up in the air like a balloon. Feel your whole body floating. Imagine being in a bath, a lake, a hot tub. or just floating in space. Each breath deeper and easier. Now picture in your mind's eve an imaginary screen, such as a movie screen, a television screen, a computer screen, or a piece of clearer blue sky. First picture a pleasant scene on that screen—somewhere that you feel comfortable. [pause] Notice how you can use vour store of memories and fantasies to help vourself and vour body feel better. Now divide the screen in half. On the left side of the screen, picture something that makes you anxious, but with the rule that no matter what you see on the screen, you will keep your body floating and comfortable. [You may have to have the subject "freeze" the "worry screen" and re-establish floating several times.] Now, while looking at what worries you on the left, use the screen on the right as your "problem-solving" screen. Think of one thing you can do to address the problem on the left. Use it as an occasion to brainstorm possible ways of addressing the problem that worries you.

Hypnosis has been effectively used in the medical setting to reduce procedure anxiety. In several randomized trials reviewed in Chapter 15, Pain Control, Lang and colleagues (1996, 2000) have shown that simple training in self-hypnosis reduces pain as well as anxiety. Although anxiety increased substantially over time, by the end of the second hour patients taught self-hypnosis had virtually no anxiety at all. Subjects in these trials were taught to induce a sense of floating in their bodies by imagining that they were in a bath, a lake, a hot tub, or just floating in space. They were then shown how to image that they were somewhere else they enjoyed being—that they had to deliver their bodies for the procedure, that they could "be" somewhere else. This allowed the subject group to escape some of the tensions associated with their immediate medical environment and feel more in control of the focus of their attention while reducing physical tension, as illustrated in the following example.

M.G. was a world-class athlete who collapsed suddenly in an alley. He was brought to a hospital emergency room, where he nearly died of internal bleeding from a lymphoma the size of a grapefruit in his abdomen. He was hospitalized and placed on chemotherapy. He was extremely anxious, and increasing doses of opiates had little effect on his pain. He was literally "climbing the walls" and alienating the nursing staff charged with his care. His parents were afraid that he was becoming a drug addict. One of us (D.S.) was asked to consult. The patient lay writhing on the bed. His hypnotizability was a 3 soft pattern, with an induction score of 7 on the HIP. It was clear that anxiety about the implications of his illness was compounding his pain. "You don't really want to be here, do you?" I inquired. "How many years of medical training did it take vou to figure that out?" he replied. "Well, then, let's go somewhere else. Where would you like to be right now?" He responded, "I'm a great swimmer, but I've never surfed." "Good," I replied, "let's go to Hawaii." I had him picture in hypnosis that he was surfing. He continued to groan, but the pattern changed. "What happened?" I asked. "I fell off the surf board," he said. "O.K. Get on it and do it right." He learned to practice this self-hypnosis regularly, with marked reduction in his anxiety and pain. Two days later, he was off of his pain medications and joking with the nurses in the hall while wearing bear claw slippers. The attending who initiated the consultation put a note in the patient's record: "Patient off of pain meds. Tumor must be regressing."

Results involving hypnosis for longer-term anxiety involving dental treatment, for example, show that it is an effective adjunct for increasing adherence to dental treatment, but not more than comparable treatments such as group therapy and individual systematic desensitization (Moore et al. 2002).

Insomnia

Insomnia is a widespread and annoying problem, but it is rarely serious in and of itself. Patients who have difficulty sleeping often complicate the situation considerably by worrying about what the loss of sleep means and by taking vast quantities of hypnotic drugs. (In this instance, the Greek root *hypnos* is correctly used.) The pattern of sleep disturbance is noteworthy because certain types of insomnia are among the most reliable indicators of a depression that will respond to somatic treatment. The most responsive pattern usually involves early morning awakening. The patient is unable to return to sleep after waking up earlier than he or she needs to in the morning, typically at 5 or 6 A.M. The patient is usually particularly devoid of energy early in the day, with improvement in the afternoon or evening. An accompanying loss of appetite and a feeling of depression are common to this syndrome.

By contrast, a much more prevalent pattern of insomnia that is usually associated with anxiety or situational stress involves difficulty falling asleep or, in a more serious form, waking throughout the night. Patients toss and turn, find themselves ruminating about problems, and become increasingly frustrated and tense about their inability to fall asleep. It is instructive to determine major events in the patient's life at the time the insomnia became a problem. It is worth bearing in mind that it may be more important to treat the underlying depression or anxiety than the insomnia, if the depression or anxiety is prominent in the history and examination of mental status.

It is also important to be aware of the widespread use and abuse of sedative and hypnotic drugs, predominantly the benzodiazepines. Although they can be quite effective in the short term, they are not a solution for chronic insomnia and have potential for habituation and addiction. Drugs of this class also hamper trance capacity because of their sedative properties (D. Spiegel 1980). It may be necessary for the patient to cease using these drugs before self-hypnotic techniques can become reasonably effective.

In addition, there is evidence that chronic use of sedative and hypnotic drugs interferes with sleep, especially rapid eye movement (REM) sleep, during which dreaming occurs (Dement and Guilleminault 1973). There is some evidence that deprivation of REM sleep over an extended period can have acute but reversible psychopathological consequences (Dement and Fisher 1963; Hobson and Stickgold 1995). Other nonbenzodiazepine hypnotic drugs have been developed, and dopaminergic agents have been found to be helpful in treating the "restless leg" syndrome that interrupts sleep (Silber 2001).

Several closely related concentration techniques have been reported to be effective in treating insomnia. Included among these techniques are Jacobson's progressive relaxation (1938, 1964), Schultz and Luthe's (1959) autogenic training, and various self-hypnosis techniques. Nicassio and Bootzin (1974) found progressive relaxation and autogenic training equally effective and more useful than simply instructing the patients to set aside time to relax. Graham et al. (1975) reported progressive relaxation to be somewhat more effective than hypnosis in treating insomnia, although they explained that the finding was related to differences in expectancy of outcome for the two groups. Although they administered the Harvard Group Scale of Hypnotic Susceptibility (Shor and Orne 1962), they were unable to correlate outcome with hypnotizability, which would have done more to clarify the role of hypnosis in the clinical result. In any event, there is evidence that hypnosis is helpful in treating insomnia (Silber 2001). Techniques involving hypnosis have also been found effective in the treatment of such parasomnias as sleepwalking and night terrors. Hurwitz et al. (1991) found that a simple hypnosis tape suggesting relaxation and peaceful sleep through the night improved the sleeping habits of 20 (74%) of 27 adults.

Once we have determined that insomnia, rather than serious depression, anxiety, or sleep apnea syndrome, is the primary problem, we begin by reassuring the patient that the problem is annoying but not dangerous. We then apply a puzzle form in the Weldon sense: The patient projects his or her preoccupying thoughts onto an imaginary screen and allows his or her body to float, because muscle tension is an enemy of sleep. Rather than forcing sleep and fighting pressured thoughts, the patient is instructed to allow him- or herself to sleep by concentrating on creating a dissociation between mental activity and physical relaxation. The patient is instructed in using the self-hypnotic mode to avoid the paradox of "forcing yourself to relax," as in the following example.

T.M. was a 36-year-old writer and married mother of one child who presented for help with a lifetime pattern of in-

somnia that had worsened during the previous 6 years, the time since her marriage. She had tried a variety of sedative and hypnotic drugs without effect. Her HIP profile score was a 2–4 increment. An edited transcript of the treatment encounter with her follows:

DOCTOR: Look up and close your eyelids. Now, take a deep breath. Three, exhale, let your eyes relax, your body float, permit one hand or the other to feel like a buoyant balloon, and let it float upward. As it does, your elbow bends and your forearm floats into an upright position; the upright position of your forearm becomes your signal to enter a state of meditation. While in the state of meditation, you concentrate on floating and at the same time concentrate on this:

In your mind's eye, imagine a huge screen: a movie screen, a television screen, or if you wish, a clear blue sky that acts like a screen. On this screen, vou project your thoughts, ideas, feelings, memories, and plans. So while you are floating here, you can now relate to your thoughts and feelings, memories, and plans out there on the screen. By doing so, you're now able to enhance your communication with your own thoughts and fantasies, and sharpen your access so that you can retrieve your thoughts and feelings more readily. This is, in a way, like setting up a private theater in which you can absorb yourself in the drama of your own life. Now, this means that when you're trying to fall asleep and your engine is working, your thoughts are going. Instead of trying to fight your thoughts to turn them off, which you can't do, what you can do is project thoughts, feelings, and fantasies out there on your screen while you are floating here. The function of that is to enable your muscles to relax.

To simply tell your muscles to relax is too intellectual and is not in the mode of your muscle understanding. But when you feel yourself floating, then you're in a much better position to bring about muscle relax-

ation. Muscle tension is an enemy of sleep. When you are trying to fall asleep, a change of guard takes place. In your autonomic nervous system, there are two controls. When you are awake, the sympathetic headquarters takes control; when you fall asleep, the parasympathetic takes over. Muscle tension interferes with this change of guard. By learning to float while you are at the same time accounting for the thoughts, feelings, and ideas that are going around in your mind, by allowing them to occur out there on the screen, you don't have to fight them; you let them occur while you are floating here. The change of guard takes place, the parasympathetic takes over, and you naturally fall asleep.

Now, I propose that you prepare yourself for this changing of the guard during the daytime by doing the following exercise, in the beginning every 1-2hours. Each time, the exercise takes only approximately 20 seconds. And the exercise is as follows. Sit or lie down, and to yourself you count to three. One, you do one thing; two, you do two things; and three, you do three things. One, roll your eyes. Two, while looking up, you close your evelids and take a deep breath. Three, you exhale, let your eyes relax, and let your body float. As you feel yourself floating, you permit one hand or the other to feel like a buoyant balloon and let it float upward, as your left hand is doing now. When it reaches this upright position, this becomes your signal to enter a state of meditation in which you concentrate on this imaginary feeling and at the same time on this concept: floating here with your thoughts, feelings, and ideas out there on the screen. Lock this concept in your mind so that it becomes a posthypnotic signal that you retain. Then when the time to sleep comes, you now have something that you can invoke rather quickly. Each time you do the exercise, you bring yourself out of the state of concentration this way: three, get ready; two, with your eyelids closed, roll up your eyes, do it now; one, let your eyelids open slowly. Then when

your eyes are in focus, slowly make a fist with the hand that is up, open your fist slowly, let it float down, and that is the end of the exercise. Now, stay in this position and describe what physical sensations you're aware of.

PATIENT: My hand goes up like that, comes down, and does whatever you tell me to do. And the same with my eyes. But I don't know that I'm totally relaxed.

DOCTOR: You're not totally relaxed, but you are learning to shift from one level to another. Then as you practice your art form, you get more and more relaxed. Have you ever noticed when you are falling asleep at night that at times you have a startle reaction and shortly thereafter you are asleep?

PATIENT: Yes.

DOCTOR: Isn't that a contradiction? You would think that if you have a startle reaction, it would wake you up.

PATIENT: Yes, but I fall asleep.

DOCTOR: Yes. Do you know what that is? A change of guard takes place. Right now, you are under sympathetic control, but when the change takes place, the parasympathetic takes over. Usually it occurs so gradually that you don't feel it. But should it happen faster than usual, that is when you really feel the startle reaction. But you know that you're going to sleep after that because the switch has already taken place. Now, have you noticed that when you try to fall asleep your sympathetic machinery is working?

PATIENT: Yes.

DOCTOR: You simply cannot turn your mind off in that way. That is like telling yourself, "Don't think about purple elephants." What happens?

PATIENT: I think about them.

DOCTOR: So, since that technique doesn't work, why use it? But what you can do is turn it around, and you know this: It is much more human to make peace with the rhythm of the way you think. You can float here with your thoughts, feelings, and ideas out there on the screen. And by doing that, it enables the change of guard to take place. Now, during the daytime you're not practicing the three steps to fall asleep. All that you are doing is preparing the art form; it is just like practicing a dance step. If you practice enough, then when the time comes to dance it just happens automatically. That is the point of practicing during the day, not to go to sleep.

Now when bedtime comes, you have two options. The first is to lie in bed, look up, close your eyelids, take a deep breath, exhale, relax your eyes, body float, let one hand come up, visualize a screen floating here, project your thoughts and feelings on it, and watch your own television program. By learning to float in this way, your muscles relax, a change of guard takes place, and you fall asleep. One thing you can do is stay in this formal trance state until the change of guard takes place, and with this shift into natural sleep, you end hypnosis. Natural sleep automatically cuts off self-hypnosis.

There is another way of doing it. Where do you like to sleep—what position do you usually sleep in?

PATIENT: On my side.

DOCTOR: All right, then, here is how you do it. Do the exercise first lying on your back. Then give yourself a posthypnotic signal. You are going to turn over on your side or on your stomach. You will continue to float but relate to the screen. Now you are responding to a posthypnotic signal that you have given to yourself; by relating to your own screen out there you are in effect in hypnosis, but it is a posthypnotic state that you have structured for yourself. Then just wait until natural sleep takes over. PATIENT: So, do the exercise and turn over.

DOCTOR: Turn over, that is right. Before you come out of it, you give yourself a posthypnotic signal. But you are going to turn over and continue to float and continue to look at your screen, so that you are now responding to your own structure. And when you are turning over, you can even imagine yourself floating as you turn over.

PATIENT: What happens if I wake up?

DOCTOR: Then you do the same thing all over again. Restructure the screen, float, and turn back over. If you fight insomnia, all you do is make your insomnia worse. That is like telling yourself not to think about purple elephants. But if you learn to float and have your thoughts and feelings out there, then the floating enhances the shift—that is, the changing of the guard. Any questions?

PATIENT: During the day when I'm practicing, if I hear noises, should it bother me?

DOCTOR: In general, to be annoyed by this is understandable. Noises are an enemy, for they disturb tranquility. The most you can do is to become so absorbed in doing your exercise that you ignore the noise. But if you have nothing to do and you start fighting the noise, then you make a bad situation worse. So the best you can do is to learn to ignore it by doing your routine: floating and relating to your own thoughts and feelings.

PATIENT: Now, you see, I feel very relaxed. Now, when I'm standing up I feel more floating than I did when I was sitting down.

DOCTOR: Okay, you have it. Now, you see that I didn't do this to you. This was a capacity you brought with you to the room. Learn to develop this art form so it is with you all of the time.

Follow-up 1 year later revealed that she was "sleeping very well" and "feeling sensationally good."

Conclusion

As in other symptom-oriented treatment, emphasis in the treatment of anxiety, concentration problems, and insomnia is placed on using self-hypnosis, on practicing the exercise frequently, and on using the dissociated state of the trance to separate psychological tension from somatic discomfort. The patient is instructed not to fight pressured thoughts but to project them onto an imaginary screen and to allow his or her body to float. In this way, the patient is taught to allow him- or herself to sleep, for example, rather than fruitlessly attempting to force him- or herself to sleep.

Thus, the attention-focusing, relaxation-inducing, and dissociative elements of hypnosis all contribute to its effectiveness at reducing anxiety, improving concentration, and facilitating sleep. Patients can be taught simple self-hypnosis exercises that allow them to better manage both somatic and psychological components of anxiety.

CHAPTER 14 Phobias

The treatment of phobias has been one of the more encouraging areas in clinical psychiatry in the past several decades. Such diverse approaches as cognitive behavioral therapy, exposure, in vivo desensitization, and hypnosis have been used with generally good results. There is widespread agreement that a firm but gentle approach can be effective in directing the patient with a phobia through a step-bystep confrontation to help overcome the phobic situation. Therapists using behavior modification often construct a hierarchy of moreand less-frightening aspects of the phobic situation. They then use relaxation techniques that are virtually indistinguishable from selfhypnosis to help their patients gradually cope with the elements of increasing anxiety on the hierarchy (Wolpe 1958). Techniques such as biofeedback have been combined with hypnosis with good results (Somer 1995). Hypnosis has also been combined with systematic desensitization to treat a blood phobia and hypersensitive gag reflex (Noble 2002). Cognitive behavioral therapy and hypnosis are useful in treating claustrophobia in cancer patients (Steggles 1999). There is general agreement that a patient's avoidance of the feared stimulus only reinforces the phobia, and many treatments involve exposure and direct confrontation with the fearful situation. Some therapists go so far as to accompany patients to feared locations (e.g., rooftops, elevators).

One report found that patients with phobias were more highly hypnotizable as a group than a matched control group who presented for smoking control (Frankel and Orne 1976), although the comparison did not adequately control for age differences between the groups and the fact that hypnotizability is higher in younger age groups (Hilgard 1965; Morgan and Hilgard 1972). This study at least suggests that persons with phobias are a good population to treat using hypnosis, although another study failed to confirm the finding (Frischholz et al. 1982b). Van Dyck and Spinhoven (1997) found that hypnotizability mediated the relationship between depersonalization and derealization in persons with phobias, especially among highly hypnotizable individuals.

Flying Phobia

Flying phobia is the most common type of phobia seen in our practice. Our treatment strategy is easily adaptable to other phobic situations, as it involves both cognitive and behavioral elements. The cognitive element involves taking a new point of view with regard to the feared situation. The dissociative and relaxing aspects of the selfhypnotic trance state are used behaviorally to reinforce the cognitive message and to give the patient a feeling of mastery when confronted with anxiety.

After the clinical history has been taken, a cluster questionnaire given, and Hypnotic Induction Profile (HIP) performed, the patient is taught to induce self-hypnosis and is instructed to put himself into a trance. When he is in the trance state, he is told the following:

Behind the fear of flying, you are unconsciously fighting the airplane. This is absurd. The plane is a mechanical instrument that is neither for you nor against you. You can correct this misconception by feeling yourself floating with the plane. Float with the plane, feel the plane as an extension of your body, and by floating with the plane, you are correcting the fear.

All human instruments are in effect an extension of the body. For example, if you want to pound something into the ground, you can use your fist. You can also use a hammer; in that sense, a hammer is an instrument that is an extension of your body, your hand, your arm. If you want to point, you can use your finger and arm. Another way you can do it is to use a wooden pointer; in that sense, the wooden pointer is an instrument that is an extension of your body. If you want to go from here to there, one way to go is to walk. Another way to go is to use a bicycle; in that sense, the bicycle is an instrument that is an extension of your body, your legs. Still another way to go is to use an automobile. In that sense, the automobile is an instrument—an extension of the legs. Still another way to go is to fly. The airplane is an instrument that in effect is an extension of the body. You can make this correction by feeling yourself floating with the plane. Float with the plane. In the course of floating with the plane, you are simultaneously ignoring and dissolving the fight with the plane and, as a consequence, the fear.

You practice the exercise as preparation several times a day, every 1 or 2 hours. Each time, it takes about 20 seconds in which you simply shift into the state of self-hypnosis and reimprint that concept: Float with the plane, float with the plane. Then bring yourself out of the trance state and go about doing what you ordinarily do. If you are not driving, you can repeat the exercise in the car while you are going to the airport. If you are driving, do the exercise at a red light only if you are sure that the light will stay red for at least 20 seconds (the time required to do the exercise). While you are waiting at the airport, sit down and do the exercise again. And while you are getting on the plane, even though you know you are walking onto the plane, instead feel yourself floating onto the plane. If you have a chance, take a look at the cockpit and the pilot as well, so that you have a fresh image of what the cockpit looks like.

Now, go to your seat and tighten your seat belt. You have three options. The first option is to put yourself in a trance state, lock in this concept of floating with the plane, and stay in the trance until the plane lands. A second option is to put yourself into the trance and stay in it until the plane is in the air, give yourself a signal to follow posthypnotically that you will continue to float with the plane even though you are out of the formal trance state, bring yourself out, and feel yourself floating with the plane during the flight. Then, go back into the formal trance state when the plane is about to land and bring yourself out of it after the plane lands. The third and preferred option is this: Go in and out of the trance state several times, each time giving yourself the signal to remain floating when you are out of the trance state. This keeps reinforcing the concept of constantly floating with the plane. Make it a point to be in the formal trance state when the plane takes off, go in and out several times during the flight, put yourself into the formal trance state when the plane is about to land, and bring yourself out after the plane lands.

As a variation, during the flight you can sometimes imagine that you are sitting alongside the pilot in the cockpit and imagine yourself relating to the instruments on the panel board. The pilot is an agent—your agent—and he or she mediates your control over the plane; so that instead of fearing that the plane is not controlled, you feel that the pilot is your agent and that he or she mediates your control. Therefore, your hand, through the pilot's hand on the instruments, is in effect controlling the plane.

The patient is instructed to meditate on this approach for a moment and then to bring himself out of the trance state. The following discussion ensues:

A basic consideration in getting your orientation is to keep in mind the distinction between a possibility and a probability. Of course there is a possibility that the plane will crash, but a crash is highly improbable. The sign of a phobia is that you deal with a possibility as if it were a probability. You confuse normal anticipatory anxiety with fear. For example, you got here to the office despite the possibility that your vehicle might have been wrecked on your way, but since you assumed that a wreck was only a possibility, in probabilistic terms you had a chance to make it here safely, and you did. While you are sitting here in your chair, there is a possibility that the boiler in the basement underneath will blow up, but you accept that as only a possibility, and the probability is that it will not happen; therefore, you can sit here and pay attention to me. There is a possibility that, when you leave the office and walk down the street, a loose air conditioner may fall on your head, yet you will walk down the street. There again, you are already making the distinction between a probability and a possibility, and you are free to walk down the street. The same principle applies in your decision about flying. To ask for an absolute, positive guarantee means that you are in a trap. It is impossible to obtain that guarantee, but what you can do is extend your usual mastery technique in making choices and apply it to your decisions about flying. as you do with everything else.

The patient is warned that the practice of drinking heavily or taking tranquilizers in large doses will interfere with his ability to concentrate and use this strategy. Intoxication can lead to panic rather than prevent it.

Often the session is ended by bringing the fundamental anxiety about death to the surface with a sense of humor. The patient is asked to send a card or call after his first flight experience. Then the patient is told, "However, if the plane crashes and you are killed, don't bother writing." The therapist's humorous manner of verbalizing the common fear about being killed on a flight places the fear in a different perspective. The message to the patient is that it is expected that one will be afraid—just do not take the fear too seriously.

The crucial aspects of the treatment strategy for flying phobia are floating with the plane and learning to view the plane as an extension of one's body. The effort is to reintegrate the person within his or her body and within the plane and establish a sense of control. This restructuring of the experience of flying makes use of the natural state of buoyancy often experienced in the dissociated state. This restructuring is best understood through learning about the nature of the anxiety experienced by people who are significantly fearful of flying.

Thoughts About the Fear of Flying

Our model for formulating the nature of anxiety about flying is similar to those models used for other phobias. An individual's experience of his or her fear of flying is usually a composite of avoidance and obsession: Some people may primarily avoid any contact with airplanes or any thought about their fears, others may primarily become obsessed, and many people alternate between the two. But the act of flying has a meaning that stimulates both avoidance and obsession. The fantasy of flying and the fear of falling have long been essential to human religion and mythology. They have often been related in complex ways to the wish for transcendence over life and death and to the moral state of an individual. Ludwig Binswanger explores this theme in his fascinating essay "Dream and Existence":

It is true of both ancient and modern literature, and true of dreams and myths of all periods and peoples: again and again the eagle or the falcon, the kite or the hawk, personify our existence as rising or longing to rise and as falling. This merely indicates how essential to human existence it is to determine itself as rising or falling. This essential tendency is, of course, not to be confused with the conscious, purposeful wish to rise, or the conscious fear of falling. These are already mirrorings or reflections in consciousness of that basic tendency. It is precisely this unreflected, or in psychoanalytic language—unconscious factor that, in the soaring existence of the bird of prey, strikes such a sympathetic note within us.

Innate in each of us Is that rising in the heart When the lark, lost in skyey space above us, Gives forth his pealing song; When above the jagged trees The eagle hovers, his wings outspread, And when above the flatness of the earth and seas The crane compels himself toward home.

(Binswanger 1963, p. 227)

He makes it clear that the conscious fear of flying is not the same as—but is clearly related to—fundamental hopes and fears about the state of one's being. The opportunity of actually flying suggests levels of unimagined escape and transcendence. First, it literally suggests transcendence of the pull of gravity and the physical limitations of the body. It suggests the possibility of escape from difficult situations and of rising above one's troubles. Thus, flying, even in common language, is connected with escape and avoidance.

But the very extremity of the hope often provokes its extreme (and not unrelated) counterpart: intense fear and anxiety. One can become obsessed with the sense of falling and with the "rug being pulled out from under." People fearful of flying feel trapped in the plane like a sardine in a can, utterly bound and unable to escape. Perhaps their wishes to escape are stronger than those of other people who accept flying with more equanimity. In any event, they feel not only utterly trapped but bound to fall as well—they are obsessed.

The individual who fears flying is seeing herself in terms of the literal need to do something: either to escape and transcend or to fall. The therapeutic strategy used here is an attempt to help the person restructure her situation by relating to herself in a different way that takes into account all of the aspects of her situation. She is encouraged to enter her own natural state of dissociation, the trance state, which itself indicates that she can revise her relationship to herself and her body. It is recommended that she "float with the plane." Floating is like flying but is more passive; floating implies less moving. One goes, but gently, letting the plane carry her. This feeling helps the patient cope with the obsessional anxiety by saying, "Yes, I am carried by the plane, but I can go along with it." Furthermore, the idea of perceiving the plane as an extension of one's body helps alter the person's perspective about who is in control. Is the plane carrying her off, or is she not in fact using the plane to get something done and to extend her body? In this sense, she is in control. The symbolic fear or wish of escaping from everything is replaced in part by the literal fact of using the plane to get somewhere faster. A certain amount of transcending is made real, not denied, yet its limitations make clear that one must float *with* the plane. With less extravagant (even if unconscious) goals, the fear of falling seems more manageable. The suggestion is that the individual does indeed decide the course of the plane; that is why she chose it. Her unconscious fears and wishes are not likely to carry her farther than she chooses to go or to drop her along the way.

In this manner, a person is taught to relate to her situation and to herself in a new way, to reexamine her controlling part in the drama of flying, and to keep the experience in perspective. She cannot escape, but she is not entirely trapped. She is indeed at risk, but it is a limited and calculated risk that is undertaken with a defined and limited goal in mind.

Outcome Studies

We found that 52% of a large sample of persons with flying phobia (N = 174) were either improved or cured after single-session selfhypnosis training. These data are consistent with the results of Horowitz (1970) in a controlled study of various treatment approaches to snake phobia. She found a 0.39 correlation between hypnotizability as measured by the Stanford Hypnotic Susceptibility Scale and scores of the patients' capacity to approach a live snake after treatment. She also found that several different approaches (e.g., relaxation, fear arousal, suggestion) were more or less equally effective in comparison with a control group.

Considerable interest in the use of behavior modification to treat phobias was apparent in the literature by the 1950s. Wolpe and other authors reported considerable success in using systematic desensitization and reciprocal inhibition (Bandura 1969; Malleson 1959; Wolpe 1958, 1973; Wolpe and Lazarus 1966). Lang and Lazovik (1963) reported significant success with systematic desensitization in treating patients with snake phobia in a controlled study. The therapy consisted of 11 sessions. Of the eleven experimentally treated subjects who responded, six were able to hold a snake at the end of the last treatment session; four of those six were still able to do it at a 6month follow-up evaluation. The authors dismissed any role of
hypnosis in this treatment with two specious arguments: The first was that no significant changes were observed in association with an undefined "pretherapy training program." The authors went on to note that "hypnosis and general muscle relaxation were not in themselves vehicles of change" (p. 524). This statement is, of course, true, but hypnosis may well be a facilitator of change in the use of any treatment strategy. Their second argument against a role of hypnosis in treatment was that there was no difference in scores on the Stanford Hypnotic Susceptibility Scale, Form A between the experimental and control groups. This fact only demonstrates that the groups were comparable.

Their argument would have been more convincing if they had demonstrated no relationship between hypnotizability and treatment response in the experimental group. Given our data for flying phobia (D. Spiegel et al. 1981b) and the data of Horowitz (1970) on snake phobia, it would be surprising if Lang and Lazovik did not find a correlation between hypnotizability and treatment responsiveness, even though their treatment strategy was systematic desensitization. As hypnosis occurs regardless of whether a formal induction ceremony is performed, it is likely that the desensitization technique tapped hypnotic capacity in those individuals who had it; certainly nothing in the study disproves this assertion.

In a carefully designed crossover study, Marks et al. (1968) addressed this problem somewhat more satisfactorily. Members of a group of 28 patients with a variety of phobias were randomly assigned to treatment with systematic desensitization or hypnosis, the latter involving simple direct suggestions of improvement of the symptom and relaxation. Patients who did not respond to systematic desensitization were switched to hypnosis. The treatment program took 3 months. The researchers found that desensitization techniques produced more improvement than hypnotic intervention, but that, in general, the differences were not statistically significant. They used a rather crude body-sway measure of suggestibility that correlated at 0.34 with treatment response for subjects treated with hypnosis. They did not report on the hypnotizability of subjects given desensitization treatment, and they used the outmoded hypnotic "depth" concept in discussing the low but positive correlation of suggestibility with outcome. They speculated that hypnosis may be more effective than desensitization among highly anxious subjects. Taken as a whole, the study purported to demonstrate that behavioral techniques were superior to hypnosis in the treatment of phobias, but

given the simplicity of the hypnotic intervention and the crudeness of the measure of hypnotizability, the outcomes for the two approaches proved surprisingly comparable.

Dog Phobia

A morbid fear of dogs is not an uncommon complaint and can be a surprisingly disabling symptom. Individuals with a phobia of dogs find themselves tailoring their lives around the avoidance of encounters with dogs; they plan their walks on the streets at times when people are less likely to be walking dogs, carry big shopping bags to protect themselves should a dog approach them, or avoid going outside at all. They may disrupt social occasions with their panic resulting from a chance encounter with a dog.

The patient with this problem is taught a restructuring strategy that acknowledges that some fear of animals is reasonable but that seeks to help the patient recognize the distinction between tame and wild animals. The patient does not fight the fear; rather, she accepts it as natural when she puts it in the proper perspective. The patient is put in a self-hypnotic trance and told the following:

- 1. A fear of animals is normal for all sensitive humans.
- 2. There is a vast difference between wild and tame animals.
- 3. By all means, keep your fear of wild animals.
- 4. Learn not only that tame animals are not harmful, but that dogs especially are people-oriented and would prefer to have a warm relationship with humans.

The patient is then given instructions to find a friend who has a dog and make this contractual agreement with the friend. Under no circumstances will the friend use tricks or deception. At the patient's request, the friend will have the dog on a leash in a room, and the patient will enter that room. The patient can repeat the experience at her own pace and try moving toward the dog. As these practice sessions continue, the patient develops a growing desire to cuddle the dog. Eventually, at her own pace, she goes toward the dog, touches it, and feels the dog's fur. The patient then sits or stands in the room and, at her request, the friend brings the dog on the leash toward the patient and finally comes all the way up to the patient. When the

patient is ready, she takes the leash, holds the dog, and cuddles it. As an ultimate act of closeness, the patient opens the palm of her hand and allows the dog to sniff or lick her palm.

This step-by-step sequence is spelled out for the patient, but the patient is informed that the time intervals between training sessions are a matter of personal choice. The whole procedure can take place in a day or a month, depending on convenience, cooperation, and desire.

This approach has elements of the systematic desensitization technique used by behavior therapists in dealing with phobias (Wolpe 1958). A hierarchy is established, allowing the patient to experience situations that in the past were increasingly anxiety-provoking. Given the generally good results that behavior therapists report for the treatment of phobias, this overlap is not surprising. The underlying dynamics are essentially the same. However, in the restructuring approach, the sequence and timing are determined by the patient rather than the therapist. The self-hypnotic trance is taught to the patient so that she can more quickly incorporate a new perspective toward dogs and, at the same time, cope with anxiety. The hierarchy of anxiety-provoking experiences also is not imagined in the restructuring approach; rather, it is acted out using the self-hypnosis exercise for anxiety containment during the process. The following case example demonstrates one successful use of the hypnotic restructuring strategy:

S.M. sought help at age 30 for a lifelong dog phobia. This fear had been shared by her mother, brother, aunts, and cousins. She had come to feel that her life was crippled by this fear; she avoided walking outside and did so only when there were likely to be few dogs in the street. Finally, she decided that she wanted to "clean house."

Her HIP score was a 2–3, and she responded to the cluster questions with mid-range Odyssean answers. After one hypnotic restructuring session, she carried out the training sessions and proceeded to the point at which she was able to touch her friend's dog. However, she had a setback when her father visited during a training session and said, "Don't be afraid." This repetition of a statement she had heard so often in the past shook her confidence, and her overwhelming fear of dogs returned. This setback underscores the fact that interactional problems are often related to the perpetuation of such symptoms and that fighting the symptom is almost invariably immobilizing. Her father's admonition not to be afraid was processed by her as a command to pay attention to the fear, and the fear returned. She returned for a second session during which she was consoled about her father's intrusion, and the technique was reviewed. She then resumed her progress in overcoming the fear.

A month after the initial visit, she phoned to say, "I'm cured. I let the dog lick my hand, and what a tremendous relief." She subsequently wrote a brief autobiography. This patient's comments are quoted at length below because they indicate not only her sense of being trapped by the symptom and her exhilaration at overcoming it, but also the variety of complex unconscious and interpersonal issues that were negotiated and influenced, even though they were not worked through consciously.

The Invisible Prison

Just as a prism held in front of the eyes distorts everything one sees, so did my thirty-year phobia of dogs distort my lifestyle and relationships, before I conquered it.

From the beginning until the spring of my thirtieth year, I existed, frozen, immobilized by deep feelings of fear, shame, and embarrassment, because of my phobia and phobic behavior.

Every waking hour of my life was spent planning my strategy of survival. As a child, if unaccompanied by an adult in the street, I searched out doorways and other escape routes from unleashed dogs. I waited on each landing until it was safe to run into my apartment. Childhood memories of afternoons without friends. Memories of the embarrassment of being different. Mocked by the kind of cruelty only children are capable of. Party dresses, but no parties. Suppose there was a dog at the party? I couldn't bear the consequences. So, alone, I sought solace and safety in close family ties, books, and classical music. I lived within my intellectual interests to define the reality of my life and to gain a perspective to maintain my sanity. Fantasies of what I could *if*. What I would *be*. Separating out the me who might be *if*—from the me who was. STUCK!

I was the personification of the silent student who knows the answer but never raises her hand in class. The satisfaction of knowing I knew had to be enough because I was too frightened to bring any attention to myself.

I was a shadow person, an observer but never a participant. Consequently my marks never reflected my knowledge. The information was frozen in my mind because I had to concentrate my energies on plotting the walk between home and school.

I developed counter-animal instincts and compensatory antennae. I could tell if an unleashed dog would remain on one side of the street or cross over. I knew which streets had the least number of unleashed dogs. I knew the streets with the most accessible doorways for ducking into for momentary safety.

My family and relatives were protective and usually understanding of my phobia during my childhood. As I grew into my teens, they were still protective but not as understanding. They were embarrassed by my behavior and fright on encountering an unleashed dog. They would tell me that I had nothing to be afraid of and that the dog was more frightened of me than I of it. These were worthless palliatives because I knew intellectually that the dog would not harm me but I could not deal with it emotionally.

Graduation from high school signified the beginning of seeking a structural change in my life. I felt I could no longer remain dependent upon my family. I had to find my own way. I was reluctant to attend college in the conventional way because I wanted to get away from a peer group I had little in common with and could not socialize with because I felt embarrassed by my phobia.

I graduated in 1957 and from that summer until 1964 I attended Hunter College, New York University, and the New School for Social Research as a nonmatriculated student.

My fear of becoming an emotional cripple was almost equal to my fear of dogs. I forced myself to go to Mexico alone. I wanted to see if I could function independently in a place unknown to me and I unknown to it. I stayed in my hotel room most of the time and left only to take taxi excursions to museums, but it was the beginning of living on my own with my handicap.

As a result of this experience I decided to go to secretarial school. I felt that the business world would provide a "safe" area in which I could keep my phobia a secret.

At the age of twenty-one I got my own apartment and my first job as a secretary. My apartment was on the third floor, so I was able to avoid the use of the elevator by using the staircase to avoid dogs. I created my own safe world from office to home in the Village.

From Phobia to Prison

My biological date of birth is December 1939, but I also consider my birthdate to be May 1970.

I am the undisputed and grateful daughter of my parents, but my brother was the emissary of my emancipation from fear.

My brother and I had often discussed the source of my phobia. I "inherited" it from my mother. I learned to be afraid of dogs from the beginning of my life. On seeing a dog in the street, my mother would run with my carriage. My fear of dogs was perpetuated and reinforced by other family members sharing the same fear. I delved into this family phobia and traced its origin to Rumania and my maternal grandmother. I was told that dogs were used punitively to ghettoize the Jews. My grandmother left Rumania when she married my grandfather and brought the fear with her.

I revealed this and other relevant information to Dr. Spiegel. I was highly motivated and excited about the prospect of overcoming my phobia.

I proved to be hypnotizable and during the first session Dr. Spiegel put me in the trance state and explained the method and technique with which I could cure myself.

While I was in the trance state, Dr. Spiegel explained my phobia to me as a normal progression considering my family background. He explained that I had never learned about domesticated animals. He taught me autohypnosis and a set of suggestions and steps I could take in my own time to overcome my phobia. He taught me the technique to gain *executive control* over my phobia and, consequently, my life. Through autohypnosis I was able to open up a part of my mind previously closed to receptivity about dogs.

The plan was for me to arrange to work with a dog and follow a number of steps for which I would prepare myself daily through autohypnosis. The poodle next door, Dolly, became my co-therapist. For two days prior to my first planned encounter with Dolly I used autohypnosis ten times a day. I began each trance state with the following suggestion: "My natural feeling of love and protection will enable me to overcome my fear of dogs." I asked Dolly's owner to hold her on a tight leash with the dog facing away from me. I was afraid of approaching her face-to-face so I started by stroking her back. It took me more than ten minutes to cross the room and touch her.

Each day thereafter I programmed myself through autohypnosis. The next steps were to stroke her whole back and head. It took me one week to accomplish this goal.

Around that time my father visited my home. I was eager to demonstrate my ability to pet the back of a leashed dog. Just as I was about to do so, he uttered encouragingly the dreaded words of my youth, "You have nothing to be afraid of." I froze. I was unable to resume the first simple step. Once again, I knew intellectually he was right but his statement devastated me. The next day I saw Dr. Spiegel and he reinforced the hypnotic suggestions.

It became increasingly difficult to arrange dog time with my neighbors, so my ex-husband bought me a puppy whom I named Spiegel. I was faced with still another problem. How could I live alone in an apartment with this dog? The solution was a home-made playpen for the puppy. The sides were made out of chicken wire and were over four feet high! We then put locks on the kitchen door to make sure this little puppy who might jump four feet high would be stopped at the door. It is amusing in retrospect, but at the time I was further traumatized by being under the same roof with a dog, even though I knew it would facilitate my cure.

The following steps in my progressive cure were: to have Spiegel lick my hand, to put my arms around Spiegel, to allow Spiegel to come to me—unleashed—for that final, allencompassing hug of acceptance. I invented a few tricks of my own to help me toward these goals. I stroked my Persian lamb jacket because it felt like poodle hair. My ex-husband licked my hand in a simulated dog lick so I could practice the feeling.

I was cured of a thirty-year phobia within one month.

One must be a prisoner just once to hear the lock twist into his gut. After all that, one is free to grasp at the trees, the stones, the sky, the birds that make sense out of air.

(Anne Sexton)

I no longer had the phobia but I still retained the habits of a phobic, for example, I had to learn to walk in the street without seeking escape routes. I learned "dog etiquette" how and when to approach dogs—because I wanted to touch and play with all of them! For the first time in my life I walked the streets, parks, beaches, country roads or anywhere without fear of dogs.

As mentioned previously, this patient's comments point to a variety of unconscious and interpersonal issues. It is obvious from the history and to the patient that her mother's fear of dogs was an important influence on her. Her setback, when her father commented that she had nothing to fear, makes it clear that her fear of dogs had some important symbolic meaning in relation to her feelings about her father. Certainly, ambivalent feelings about her father could hardly have been more clearly expressed than by her using the therapist's name for a dog.

However, the emphasis in the therapy was on mastery rather than insight. It is interesting that this patient, with a score of 2–3 on the profile and with an induction score of 8.5, went on to consolidate her gain and demonstrate a ripple effect in other areas of her life. Seemingly, the symptom was resolved without resolution of underlying unconscious conflicts that may have related to its emergence, if not to its perpetuation. The subsequent events in her life, as reported by the patient herself, are revealing:

I will spare the reader my cliche-ridden descriptions of my feelings (then and now) by limiting the changes to the following examples.

Pre-cure, I was obsessive about order and cleanliness in my home: I was "Mrs. Craig Clean." As I gained control and mobility in my personal life, I needed less control and regimentation in my home. I had also been obsessive about paying bills before they were due.

Pre-cure, I was *preoccupied* with literature, movies, plays, and art about concentration camp victims and survivors; doom and death were my catharses.

My eating habits changed. Pre-cure, I ate mostly refined carbohydrates for energy. Eating was a joyless chore, because I had a knotted, nervous stomach. I remember my father scrambling half an egg in an effort to get something other than a chocolate cupcake down my throat. To this date, I am working on reversing the nutritional damage done to my body during childhood and early adult years.

To this date, too, I have not completely reversed the thirty years of tension and tautness in my body. My body had been my instrument of escape, always tensed, ready for flight. My tolerance for stress and ability to function under a lot of pressure are unusually high because of my pre-cure conditions.

Pre-cure survival had been a challenge. Reinterpreting my handicap to my advantage became a challenge.

"To live is to suffer, to survive is to find meaning in the suffering" (Dr. Victor Frankl).

I have sought to sketch my two worlds within and without the veil of fear. Thus the *modus operandi* of my transcendence from phobia to freedom can be loosely defined as pragmatic and experiential.

I believe that problems and obstructions that individuals face can be solved if the individual has the motivation and the mechanism with which to bring about change.

I believe that one can discover the meaning in suffering and derive a sense of responsibility from its existence and reinterpretation.

This patient made the decision to finish her college education, which had been neglected, and study for a master's degree in social work. She was exuberant about her new independence and direction in life. As her story makes clear, she was immobilized as much by the humiliation of having the fear as she was by the fear itself, and her sense of mastery seems to have given her courage to overcome other fears and limitations in her pattern of living. As she notes at the end of her comments, the two critical factors that seemed to work were "the motivation and the mechanism." She was highly motivated to eliminate the major secondary loss that the symptom posed for her life, and she found a mechanism that facilitated change—a dynamism that did not humiliate her further but that gave her a sense of mastery.

Other Phobias

The treatment techniques for other types of phobias are similar to that described for the flying phobia. The patient is taught a self-hypnosis exercise that emphasizes his restructuring of the old situation. What follows are several adaptations of the technique for other specific kinds of phobias.

Acrophobia

The patient is told to put himself in a trance state and then is given the following three-point message:

- 1. Gravity can be my security.
- 2. My feet lock me into this magnetic gravity.
- 3. This downward pull stabilizes my movement.

The patient is instructed to repeat this exercise every 1-2 hours, as in previously described strategies. The reinforcement signal is to simply stroke the side of his forehead to remind himself of this commitment toward the stabilized pull downward.

Agoraphobia

For agoraphobia, which can be socially crippling, the patient in the trance is given this three-point message:

- 1. Objective space is infinite.
- 2. My subjective space is my choice.
- 3. I choose to limit my space to my private plastic dome. Through this private, imaginary dome, I can relate to the world around me.

The patient is told that the plastic dome is a product of her imagination in which, by design, she can establish a territory around her own body. By choosing to focus on this territory, she separates the individual experience of relating to space from an often frightening sense of the infinite. The "plastic" nature of the dome enables her to see and relate through this imaginary shell that she puts around herself to affirm her relationship with her own private territory.

Conclusion

There are numerous other phobias, and it is not unusual for a patient to have more than one. In our experience, mastery over the primary phobia is sufficient to lead to resolution of the other satellite phobias.

The treatment strategies presented for flying phobia, dog phobia, acrophobia, and agoraphobia provide the general framework for dealing with other phobias.

The trance state is used not only to reduce anxiety and help the patient acknowledge the old fear but also to place the old fear in a new perspective. She is encouraged to examine the difference between a probability and a possibility and to exist with her fear but to rearrange it so that it is no longer overwhelming. The patient is given the sense of having something to resort to if she should become frightened and is encouraged to concentrate on the aspects of the situation that reinforce her own sense of being in control. For example, she views a plane as an extension of her body, or she recognizes that dogs prefer friendly relations with people.

Patients with intact profiles seem especially responsive to brief intervention using hypnosis for the treatment of phobias. Although phobias have been successfully treated by a number of other approaches, including behavior modification and antidepressants, the role of hypnosis as a facilitator and accelerator of therapy is especially clear among patients who have phobic symptoms. Techniques using hypnosis to treat phobias deserve primary consideration, because a cure is often possible in one or two sessions.

CHAPTER 15 Pain Control

Pain, like anxiety, has an important signal function. It is a message to the psyche that something is wrong with the soma, and it constitutes an urgent call for action. But, like anxiety, pain can get out of hand, become the problem itself, or interfere with corrective action. The message becomes the medium: In our mechanistic way, we are inclined to dichotomize the pain experience and to insist that pain is *real* only if, with diligent medical exploration, we find some plausible physical dysfunction to account for it. Conversely, pain is often described as *unreal* or *hysterical* if no plausible organic explanation is found or, even worse, if pain relief follows the administration of a placebo. This way of describing pain constitutes a sad misunderstanding; many individuals who have pain associated with serious organic disease are quite capable of responding to placebos or hypnotic pain relief, and many individuals with so-called functional pain do not respond to placebos.

Pain Perception

It is useful to think of pain perception as a complex interaction between the physical stimulus that causes the pain and the psychological reactive component to it, which we can call the *hurt*. In most clinical pain situations, fortunately, the physical component is not so severe that it saturates the entire perceptual channel, leaving no room for the reactive component (i.e., the suffering or hurt). When the physical stimulus causing pain is that intense, it often leads to surgical shock or other kinds of unconsciousness. Should the patient retain consciousness during an overwhelming physical insult—for example, the passage of a renal stone, acute pancreatitis, or a crushing blow to a limb—psychological factors are of minimal importance in controlling the pain. However, in most clinical pain situations, the reactive component is important and provides great flexibility in the perception of the pain.

This last point was well made in a classic study by Beecher (1956). who compared the pain experiences of a group of soldiers wounded on the Anzio beachhead during World War II with those of a matched group of comparably injured surgical patients in Massachusetts General Hospital. He found that the soldiers reported minimal pain and rarely requested pain medication, whereas the surgical patients demanded drugs for pain relief. The soldiers were grateful to be alive and wished to remain as alert as possible so that they could remain alive. They processed their pain stimuli very differently from the surgical patients, to whom the pain represented an interference in the flow of their lives. Beecher disconnected the severity of the injury from the hurt experienced by the patient. He went on to demonstrate that relief from pain also has a psychological dimension. Beecher (1959) demonstrated that one-third of a group of patients in pain responded to a placebo medication, two-thirds responded to morphine, and one-third did not respond to morphine. In other words, one-half of the morphine responders were really placebo responders, and onethird of the population responded to neither.

On the other hand, the subjective reporting of pain is neither arbitrary nor capricious. Hilgard and Hilgard (1975) found that when using the cold-presser test as a laboratory measure, subjective reporting of discomfort correlated better with the temperature of the water than with such physiological measures as an increase in heart rate and blood pressure or a decrease in galvanic skin resistance (a measure of sweating). The book in which these data are presented, *Hypnosis in the Relief of Pain*, offers an excellent recent review of the role of hypnosis in pain control. Because of the importance of the reactive component in the pain experience, and especially because of the sense of physical threat implied by clinical pain, it must be borne in mind that the laboratory experience with paid volunteers is of a very different order. Thus, laboratory data, although interesting, are not directly applicable to the clinical situation.

Cortical Modulation of Pain

Pain is the ultimate psychosomatic phenomenon. It is composed of both a somatic signal that something is wrong with the body and a message or interpretation of that signal involving attentional, cognitive, affective, and social factors (Henderson 2000). The limbic system and cortex provide the means of modulating pain signals (Brose et al. 2002; Melzack 1999), either amplifying them through excessive attention or affective dysregulation or minimizing them through denial, inattention, preoccupation, relaxation, or attention-control techniques. It is well known that many athletes and soldiers sustain serious injuries in the height of sport or combat but are unaware of the seriousness of their injuries until someone points out bleeding or swelling. In contrast, other individuals with comparatively minor physical disturbances report being totally immobilized and demoralized by pain. A single parent with a sarcoma complained of severe, unremitting pain that was interlaced with tearful concern about her failure to discuss her terminal prognosis with her adolescent son. When an appropriate meeting was arranged to discuss her poor prognosis and plan for his future, the pain resolved (Kuhn and Bradnan 1979).

Pain perception is influenced by one's state of consciousness. For example, chronic pain tends to be worse during evenings and weekends, when most people are not distracted by routine activities. Chronic pain is often reduced during sleep but may, in fact, interfere with sleep; more severe kinds of pain can substantially reduce sleep efficiency. Many of the more potent drugs that treat pain also reduce alertness and arousal, an often unwanted side effect that can lead to abuse of analgesic medications.

Attention to Pain

Like any other perceptual phenomenon, pain is modulated by attentional processes: One has to pay attention to pain for it to hurt. Novelty tends to enhance pain perception (as with an acute injury), although overwhelming and serious injury is sometimes accompanied by a surprising absence of pain perception until hours after the injury occurred. This traumatic dissociation has been observed in victims of natural disasters, combat, and motor vehicle accidents (D. Spiegel 1988a).

When Melzack and Wall (1965) postulated the gate control theory of pain decades ago, they observed that higher cortical input could inhibit pain signals as well. They cited Pavlov's observation that repeated shocks to dogs eventually failed to elicit pain behavior—that is, the dogs habituated to the painful signals—and this experience could only be explained as cortical inhibition of pain response. Thus, in their model, there is room for descending inhibition of pain via the substantia gelatinosa as well as by competitive inhibition at the spinal cord gate (Melzack 1999). The important concept we gain from

this theory is the interaction between central processing and perception of noxious stimuli at the periphery.

Somatic perception is modulated by the cortex, which enhances or diminishes awareness of incoming signals. Recent neuropsychological and brain imaging research has demonstrated at least three attentional centers that modulate perception: a posterior parieto-occipital orienting system, a focusing system localized to the anterior cingulate gyrus, and an arousal-vigilance system in the right frontal lobe (Berger and Posner 2000; Posner and Peterson 1990). Among other functions, these systems provide for selective attention to incoming stimuli, allowing competing stimuli to be relegated to the periphery of awareness. There is also recent evidence that the medial cingulate gyrus serves as a relay center, integrating pain-related signals from the periaqueductal gray matter, the thalamus, and the cortex (Hofbauer et al. 2001; Rainville et al. 2001, 2002).

Mood Disorders and Pain

Anxiety and depression are often associated with a profound sense of helplessness. They are noted as frequent concomitants of pain (Chochinov 2001; Evans et al. 1999; Hendler 1984; Kiecolt-Glaser and Williams 1987; Massie and Holland 1987, 1990; McDaniel and Nemeroff 1993; D. Spiegel 1987, 1996; D. Spiegel et al. 1994b). Early work implied that patients with psychopathology complained more about pain than patients without psychopathology (Blumer et al. 1982; Bond 1973; Woodforde and Fielding 1970). Later research confirms that there is an interaction between chronic pain and depression and suggests that the former may amplify or produce the latter (D. Spiegel and Sands 1988). Indeed, the presence of significant pain among cancer patients is more strongly associated with major depressive symptoms than is a life history of depression (D. Spiegel and Sands 1988).

According to Damasio (1999), pain is not synonymous with emotion. Rather, it is the result of

a state of local dysfunction in a living tissue, the consequence of a stimulus—impending or actual tissue damage—which causes the sensation of pain but also causes regulatory responses such as reflexes and may also induce emotions on its own. In other words, emotions can be caused by the same stimulus that causes pain, but they are a different result from the same cause. Subsequently, we can come to know that we have pain and that we are having an emotion associated with it, provided there is consciousness. (p. 76)

Depression is the most frequently reported psychiatric diagnosis among patients with chronic pain. Reports of depression among populations experiencing chronic pain range from 10% to 87% (Dworkin et al. 1990). Patients with two or more pain conditions have been found to be at substantially elevated risk for major depression, whereas patients with only one pain condition did not show such an elevated rate of mood disorder in a large sample of health maintenance organization patients. The relative severity of the depression observed in patients with chronic pain is illustrated by the finding of Katon and Sullivan (1990) that 32% of a sample of 37 patients experiencing pain met the criteria for major depression, and 43% of the sample had a past episode of major depression.

Anxiety is also especially common among those with acute pain. Like depression, anxiety may be an appropriate response to serious trauma through injury or illness. Pain may serve a signal function or be part of an anxious preoccupation as in the case of the woman with the sarcoma cited in the section Cortical Modulation of Pain. Similarly, anxiety and pain may reinforce each other, producing a snowball effect of escalating and mutually reinforcing central and peripheral symptoms.

Pain occurs in a psychophysiological context that can either exacerbate or diminish it (Magid 2000). Pain usually occurs within the context of the subjective distress and existential threat associated with a major medical illness or trauma. The term *pain experience* represents a combination of both tissue damage and the emotional reaction to it. There is ample evidence that suggests that psychological factors greatly influence the pain experience in either positive or negative ways. One critical factor that can amplify or diminish pain is the sense of helplessness that surrounds it. Helplessness is the key element underlying the intensity of reactions to trauma (Butler et al. 1996; Koller et al. 1992; D. Spiegel 1989). However, this helplessness also constitutes a therapeutic opportunity: Many patients with pain report that they would find their pain tolerable if they could modulate it at least partially. The desire for control is a critical component of pain management.

Hypnosis for Pain Management

There is growing recognition of the place of hypnosis and related techniques in pain management (Loitman 2000). Psychological approaches to pain control such as hypnosis can be highly effective analgesics and are underused (Holroyd 1996). A Technology Assessment Panel convened by the National Institutes of Health reviewed the literature, took testimony, and concluded that hypnosis is an effective pain treatment:

The evidence supporting the effectiveness of hypnosis in alleviating chronic pain associated with cancer seems strong. In addition, the panel was presented with other data suggesting the effectiveness of hypnosis in other chronic pain conditions, which include irritable bowel syndrome, oral mucositis, temporomandibular disorders, and tension headaches. (NIH 1996, p. 315)

It has been known since the middle of the 1800s that hypnosis is effective in controlling even severe surgical pain (Esdaile 1846). Hypnotic analgesia and similar techniques work through two primary mechanisms: physical relaxation and a combination of perceptual alteration and cognitive distraction. Pain is not infrequently accompanied by reactive muscle tension. Patients frequently splint the part of their body that hurts. Yet, because muscle tension can, by itself, cause pain in normal tissue, and because traction on a part of the body in which pain is being experienced can produce more pain, techniques that induce greater physical relaxation can reduce pain in the periphery. Therefore, having patients enter a state of hypnosis so that they can concentrate on an image that connotes physical relaxation, such as floating or lightness, often produces physical relaxation and reduces pain.

The second major component of hypnotic analgesia is perceptual alteration. The specific alteration technique used should be adjusted on the basis of the degree of hypnotic ability of the subject. Lesshypnotizable individuals often respond better to distraction techniques that help them focus on competing sensations in another part of the body. However, most patients can be taught to develop a comfortable floating sensation in the affected body part. Some patients can be taught to imagine that the affected body part is numb. This technique is especially useful for extremely hypnotizable individuals who can, for example, imagine a shot of Novocain in the affected area and relive an experience of dental anesthesia, which they can then transfer to the painful part of their body. They can also simply "switch off" perception of the pain with surprising effectiveness (Hargadon et al. 1995; Miller et al. 1993). Some highly hypnotizable patients prefer to imagine that the pain is a substance with dimensions that can be moved to another part of the body or can flow out of the body as if it were a viscous liquid. Other highly hypnotizable patients may prefer to dissociate the affected part from the rest of the body. As an extreme form of hypnotically induced controlled dissociation, some patients may imagine themselves floating above their own body or stepping outside of their body and going elsewhere, creating distance between themselves and the painful sensation or experience.

Temperature metaphors are often useful, which is not surprising given the fact that pain and temperature sensations are part of the same sensory system, the lateral spinothalamic tract. Such metaphors may be especially effective with more moderately hypnotizable patients. They may be taught to imagine that an affected body part is cooler using an image of dipping it in ice water, a bucket of ice chips, or an ice-cold mountain stream, or they may be taught to imagine heating the affected part with the sun, in a warm bath, or by applying a heating pad. Imagining these temperature sensations can often help patients transform their perception of pain signals.

The choice of images or metaphors used for pain control involves certain general principles. The first is that the hypnotically controlled image should serve to filter the hurt out of the pain. The image should also help transform the pain experience. The patient is taught to acknowledge that the pain exists, but that there is a distinction between the signal itself and the discomfort that the signal causes. The hypnotic experience, which patients create and control, helps them transform the signal into one that is less uncomfortable. Patients learn to expand their perceptual options. Initially, they experience the pain as either there or not there. They can learn to see a third option, in which the pain is there but is transformed by the presence of such competing sensations as tingling, numbness, warmth, or coolness. Finally, patients are taught not to fight the pain. Fighting pain only enhances it by focusing attention on the pain; augmenting related frustration, anxiety, and depression; and increasing physical tension

that can literally put traction on parts of the body in pain and increase the pain signals generated peripherally. It is worth noting that some research has indicated that, especially among highly hypnotizable individuals, counterpain imagery and a sense of control do not necessarily enhance hypnotic analgesia, at least in an experimental situation (Hargadon et al. 1995). However, De Pascalis et al. (1999) showed that somatosensory amplitude reduction was greater during focused hypnotic analgesia than during the experience of dissociated imagery. An especially rewarding aspect of using hypnosis in pain treatment, other than the likelihood of a positive result, is the immediate feedback available to the patient and the therapist regarding what works and what does not work. Thus, hypnotic analgesia treatment is an ongoing opportunity for the patient and the therapist to learn from experience by trying new methods and learning from what happens.

Self-Hypnosis

Hypnotic techniques can easily be taught to patients for self-administration (D. Spiegel and Jasiukaitis 1999; H. Spiegel et al. 2000). The components of pain treatment using self-hypnosis are the following:

- 1. Explain hypnosis.
- 2. Measure hypnotizability.
- 3. Teach entry into state of self-hypnosis.
- 4. Induce relaxation by concentrating on floating.
- 5. Induce hypnotic analgesia.
 - a. Concentrate on a competing sensation (e.g., warmth, coolness, tingling, lightness, heaviness).
 - b. Filter the hurt out of the pain.
- 6. Explain anxiety control: screen technique.
- 7. Bring patient out of hypnotic state.
- 8. Provide instructions for practicing self-hypnosis.

Patients with pain can be taught to enter a state of self-hypnosis in a matter of seconds with simple induction instructions such as the following: "Look up while slowly closing your eyes, take a deep breath and then let the breath out, relax your eyes, let your body float, and allow one hand to float up in the air like a balloon." They are then instructed in the pain-control exercise and taught to bring themselves out of the

trance by reversing the induction procedure: "Look up again, let your eyes open, and let your raised hand float back down." Patients can use this exercise every 1–2 hours initially and any time they experience an attack of pain. They can evaluate their effectiveness in conducting the pain-control exercise by rating on a scale from 0 to 10 the intensity of their pain before and after the self-hypnosis session. As with any paintreatment technique, hypnosis is more effective when used early in the pain cycle, before the pain has become so overwhelming that it impairs concentration. Patients should be encouraged to use this technique early and often, because it is simple and effective (D. Spiegel and Bloom 1983b) and has no side effects (D. Spiegel 1986c).

Technique

After an appropriate history is taken and the clinician is convinced that no further medical explanation as to the cause of the pain is required, the cluster questionnaire is completed and the Hypnotic Induction Profile (HIP) is performed. The results of the profile are particularly important for this approach, as there is considerable evidence in the literature that responsiveness to hypnotic pain-relief intervention is related to hypnotizability (Bowers 1976; Hilgard and Hilgard 1975). Furthermore, different strategies are relevant and useful to the highly hypnotizable subjects as compared to the low and mid-range subjects. As an overview, patients who score 3 and above on the profile often respond well to trance instructions that the painful part of their body will become numb. Patients in the 2-3 range often respond well to instructions that alter the perception of the pain, converting it to a tingling numbress or an ache, for example. Less-hypnotizable patients in the 1-2 range respond best to a distraction technique in which they are instructed to pay attention to some other sensation and, by inference, to ignore the pain.

If trance capacity is not assessed, the results for an individual with good ability to restructure pain perception using hypnosis may be misunderstood as a treatment failure when, in fact, the wrong strategy was used. For example, a 45-year-old man with syringomyelia and chronic, associated pain sought help through hypnosis for pain relief. The hypnotist used the naive direction, "When I touch your body, the pain will go away." Such an approach might temporarily have worked with a grade-5 patient, but it left this patient still in pain and, in addition, disgusted. Several months later, the same patient was examined

with the HIP, and he scored in the 1–2 range. He was taught an exercise that mobilized both his intact-but-low trance capacity and his critical cognitive style. Distraction from the pain was established by using the trance state to help him remember (rather than experience) the sensation of being in a dentist's chair and receiving Novocain anesthesia. He was encouraged to actually apply an ice bag to his extremities to intensify his experience of setting up a filter between himself and the pain. He quickly mastered this method and acquired such expertise in controlling his pain that, in one teaching session with medical students, he aptly referred to himself as a "co-therapist for the pain."

Restructuring Strategies

Before inducing the actual trance for hypnotic pain relief, it is often useful to teach the patient two little lessons in pain perception. These exercises impress on the patient the fact that she can control her perception of pain by controlling both muscle tension and the amount of attention that she pays to the pain. The patient is told the following:

If in addition to the original pain you have, you react by tensing muscles around the painful area, the muscle tension alone can produce more pain. You are thus inadvertently producing even more pain than existed in the first place, as you try to cope with the original pain. To make this clearer, make a tight fist, stretching out your arm straight. Now, make a fist three times harder than that, and concentrate on the pain you feel as a result of this muscle tension. Now, let the fist open and notice how the pain from the muscle tension dissipates.

The second lesson begins with asking the patient to produce pain in a different manner. The instructions are

Now, pinch the web of skin between your thumb and forefinger until you feel pain. All right; now stop, and let the pain go away. Now, try it again, the same way. Only this time, look at that painting over there on the wall and tell me what you think the artist was trying to say.

The patient gives some bemused explanation, and then you ask her to decide in which of these two pinching experiments she experienced more pain, the first or the second. The patient, as a rule, observes that she felt more pain the first time. The second time, she experienced less hurt because she was distracted by focusing attention on the painting. This is the second lesson: When one is absorbed in something else, the hurt is lessened.

The patient is then taught to put herself in a trance.

THE DIONYSIAN PATIENT If the patient is a Dionysian personality type (a high scorer [3 or above] on the HIP), the following technique or a variant thereof can be used:

Imagine yourself sitting in a dentist's chair. Picture the lights in the room, the feeling of the chair, the smells and sounds of a dentist's office. Remember the time when he took out that large needle and injected Novocain into your gum. Try now to re-create that feeling of the pressure in your gum and the gradual numbness spreading throughout your jaw and your cheek. Feel your cheek becoming more and more numb, that numbness spreading throughout cheek and mouth. Then, when you are ready, let your hand float up and touch your cheek and feel how numb it is, and as you feel that numbness, let the numbness spread from your cheek to your fingers, so that your hand begins to feel numb. Then, let your hand float over to touch the part of your body in which you feel some discomfort, and let that numbness spread. This numbness becomes a filter through which you experience pain, and you learn in this manner to filter the hurt out of the pain.

The patient is instructed not to fight the pain, but to focus on the numbness instead. In this manner, she is simultaneously distracting herself from her awareness of pain. The subject uses intense hypnotic concentration to focus on a comforting sensation. At the same time, she uses the constriction of peripheral awareness to ignore the hurt associated with the pain. This concept of combined awareness of numbness and pain, of filtering the hurt out of the pain, is a formula that enables the patient to acknowledge the presence of the pain and, at the same time, to be aware of something else—the numbness. This is a kind of parallel or dual awareness. Furthermore, the instructions include the notion of a sense of mastery and pride when the patient is able to supersede the pain with a sense of numbness. The patient is to do this exercise every 1–2 hours or whenever she feels a sense of discomfort.

The capacity to dissociate hurt from pain in a highly hypnotizable individual is so great that, if necessary, major surgery can be performed with self-hypnosis as the sole anesthetic agent, as described in the following case example: Dr. E.E. Rockey of New York Medical College diagnosed a right lower-lobe carcinoma of the lung in a 50-year-old patient with chronic obstructive pulmonary disease. A lobectomy was indicated; however, because of the obstructive disease, he was a poor candidate for inhalation anesthesia. A decision was made to perform the surgery using hypnotic anesthesia after a profile performed on the man indicated that he was a grade 4.

The patient was highly motivated and understood the risks of conventional anesthesia. He had experienced hypnosis in the profile but was given no extensive training before the operation. In the operating room, Dr. Rockey instructed him to "Feel yourself floating in ice water, surrounded by ice cubes."

The patient's conscious memory after the procedure follows:

First I felt as though my windpipe were frozen. Then, I felt him marking my chest with a pencil (the scalpel) and wondered why. Anyway, from then on I don't remember a damned thing. The next thing I remember is coming into a recovery room and ripping the pipes out of my mouth, you know. And that is the whole story.

He was then rehypnotized, and he regressed to recall what had gone on during the 3-hour procedure:

I can remember a sort of crunching sound—I expect my ribs were being cracked. I could hear it. Then I remember floating in the Arctic, watching an iceberg with seals and penguins and things like that. I was trying to make a joke of the whole thing. That was the idea, to create a chilly situation—seals and penguins go along with the Arctic.

Ironically, at the conclusion of the postsurgery interview, the patient added, "I'm a coward when it comes to pain." His dissociation was so profound that he could not give himself credit for it; it was as though someone else had undergone the pain. The surgical procedure was completed successfully, and the patient required no analgesic medication in the postoperative period.

THE ODYSSEAN PATIENT The mid-range, or Odyssean, patient is often asked what somatic sensation for him is associated with pain

relief. Usually, an alteration in temperature, either increased coldness or warmth, provides some relief and becomes a metaphor for the self-hypnotic exercise. It is of interest that in the spinal cord, pain fibers run with temperature fibers through the lateral spinothalamic tract to the thalamus, and these are the only major sensory fibers that do not run in the posterior columns. Thus, alterations in temperature often do provide some kind of pain relief, and the metaphor of temperature change is an effective one when used with hypnosis. The neurophysiology is intriguing. There have been speculations that temperature is crucial to a central nervous system pain-and-pleasure reinforcing system (Chin et al. 1976).

The mid-range patient is put into a trance and is given these instructions:

While your hand is in the air, imagine yourself floating, and as you feel yourself floating, make it more vivid by imagining that you are floating in water—make it ice water. As a matter of fact, make it so icy that you feel the cubes of ice floating in the water, and as it gets colder and colder you can even feel an imaginary tingling numbness coming from the cold. This tingling numbress gives you a protective coating around the pain area, so you learn to filter the hurt out of the pain. Practice this exercise every 1 to 2 hours—the exercise itself takes about 20 seconds—and each time you bring yourself out of this state of self-hypnosis, give yourself a posthypnotic signal to retain this feeling of induced numbness, even when you're out of the formal trance state. Eventually, with practice, you can retain a constant state of numbness around the clock, which gives you a chance to modify your pain perception. That is, even though intellectually you know that the pain is there, by making your commitment to the imposed numbness, you feel the numbness more than the pain. That is, you filter the hurt out of the pain.

The patient is then instructed to bring himself out of the state of self-hypnosis by counting backward from three to one. Further instructions are

By doing this exercise every 1 to 2 hours, you establish a private signal system between yourself and your body, so that you're ever alert to this commitment to maintain the tingling numbness. Now, if you find that you're more aware of the pain between exercises, give yourself a private signal, like clenching a fist, stroking your arm, or stroking the pain area. Each time you do this, it becomes a

reminder of your commitment to cover the pain area with a blanket of tingling numbness. This gesture becomes a reinforcement signal that reminds you of your commitment to maintain this blanket of numbness that filters the hurt out of the pain.

THE APOLLONIAN PATIENT The Apollonian patient who scores lower on the profile, in the 1–2 range, is less likely to respond to such metaphors. Even with focal concentration, her peripheral awareness is never so withdrawn that it enables her to ignore the painful stimulus. Rather, she is encouraged to focus as much as possible on a distracting stimulus. The patient is put in a trance state and told, for example, the following:

Each time you begin to feel the discomfort, focus instead on the exquisite sensations you can feel in the fingers of your left hand: Rub your fingers, one against the other, and describe to yourself the texture, the temperature, the sensation that you feel. Each time you are tempted to concentrate on the sense of discomfort elsewhere in your body, rub your fingers together gently, and discipline yourself to pay attention to the sensations in the fingers in your left hand. This becomes an exercise through which you filter your perception of the pain and concentrate instead on what you choose to concentrate on.

It is often helpful to remind the patient that this is an exercise that requires work, but that through it, mastery of the pain experience is possible. The following case example demonstrates the pain control that can be attained by an Apollonian patient through the use of a distracting stimulus with self-hypnosis:

A 62-year-old professor recovered from a cerebrovascular accident that left him with a painful spastic paralysis of the left wrist and hand. He was otherwise intact and alert, and he wanted very much to resume his teaching and writing. The one major obstacle was the sedation he experienced as a side effect of the analgesic drugs that were prescribed. Because of this obstacle, he sought help with hypnosis.

He scored a grade 1 on the profile. Because of this lowbut-intact hypnotic capacity and his high motivation, he was instructed to put himself into a trance and feel an icy cold numbness in the affected hand and wrist. Because he was a less-hypnotizable patient, he was urged to practice placing an ice bag on his hand and wrist to intensify his ability to remember the sensation during the self-induced trance. He succeeded, but he noted that the pain tended to return after lunch. It turned out that he was accustomed to taking a nap after lunch, and that the intense concentration required for hypnotic pain relief was impaired by fatigue. He was encouraged to sleep immediately after lunch and to resume his hypnotic exercises on awakening.

Such was his success that he was able to use his spastic hand on his electric typewriter. He took analgesic medication only in the evening as a preparation for sleep, after his day's work had been completed. He maintained this pain control for the remaining years of his life.

Because most pain medications are sedating, they interfere with trance capacity. Therefore, whether to include pain medication in treatment often becomes an uncomfortable choice for the patient and the therapist. One patient with a grade 2–3 on the HIP noted that she could not do the hypnotic exercise, which provided her with relief of atypical facial pain, within 2 hours of taking the minor tranquilizer that had been prescribed for her. However, as soon as the sedative effect had worn off, she was able to reinduce the hypnotic analgesia. Often, the most useful way to wean patients from their pain medications is to tell them to do the hypnotic exercise just at the time when they would ordinarily take another pain pill, in an effort to prolong intervals between medication. In this way, they are likely to be freer of sedative side effects and are able to gradually acquire a sense of mastery over the pain, thereby diminishing their use of consciousness-clouding pain medication.

Patients under acute stress—for example, in trauma—often spontaneously go into a trance state. They are frightened, concentrating intently, and especially receptive to any intervention that will relieve them of pain and anxiety. The following case example illustrates this traumatic experience:

A man in his 30s was brought into the emergency ward of Massachusetts General Hospital within hours of having his left hand severed in an industrial accident. Numerous members of the medical and nursing staffs attended him at first, preparing him for an attempt at surgical restoration of the hand (an effort that ultimately failed). A few minutes later, the entire staff left him alone in the emergency operating room as preparations continued to admit him to the hospital.

I (D.S.) was a medical student at the time and remained in the room, not having a special duty to perform. My initial impulse was to leave as well, as the man was in considerable discomfort and had lost a hand, which aroused considerable anxiety in those around him. However, I instead asked the patient if he was in pain. The man responded that he was, and I suggested an exercise as something that might help with the pain. The patient readily agreed.

I instructed him to concentrate on developing a sense of floating after rolling up his eyes and closing them. He communicated his response to each suggestion by a nod of his head. I then asked him whether he could remember having been in a dentist's chair, to which he assented, and whether he could remember the feeling of having a Novocain injection, recalling to him the initial discomfort and pressure of the fluid being injected into the gum. He nodded, and I asked him to re-create that feeling in his mouth, which he apparently did. I then asked him to first remember and then re-create the feeling of numbress spreading through his mouth and cheek. After he nodded, I suggested that the numbness would spread down his mouth, through his jaw, to his shoulder and his injured arm. I also explained that he could reinforce this feeling by repeating the exercise that we had done together-by closing his eyes, floating, and re-creating the numbness—and that the numbness would last for some time after he came out of the state of concentration. At the end of this procedure, which lasted approximately 5 minutes, the patient said that he felt less pain.

A relevant piece of data about the use of the procedure is that it enabled me to stay in the room with the patient in the face of his serious injury and the sense of helplessness it engendered. Furthermore, it gave me the sense that I could be of help to the patient without doing anything mechanical to him, such as administering medication. One wonders how often medical procedures are performed for the purpose of treating the legitimate anxiety of the helping person rather than the needs of the patient. The procedure was helpful to both me and the patient; furthermore, it had no side effects. Hypnosis can also be extremely helpful to patients enduring the anxiety and stress of painful hospital procedures, as the following case example illustrates:

K.S. was a 45-year-old mother of three who had undergone a mastectomy for carcinoma of the breast 8 years previously. She developed metastases of the lung and spine and a gastric ulcer. She found the necessary gastroscopy impossibly painful and sought help with hypnosis. Her profile was 2–3 intact, and she was taught to use the trance state to telescope time, making an experience seem much shorter than it actually was. She used the self-hypnotic exercise during the gastroscopy, and reported the following by phone:

I was totally relaxed. I remember this from the last time as one of the most painful things I have ever experienced. I was absolutely right. The last time it seemed like it took 4 hours, but this time is was different—it felt like I was only there 2 or 3 seconds. It was actually 10 minutes in all. I maintained my arm position but was in total agony, sweating, gagging. However, I did my best to concentrate on my balloons. I even felt like screaming. While the agony was total. I was still completely able to cooperate with [the doctor]. When he took out the tube, it was so short a period that I thought something had gone wrong and he would have to do it over again. I am impressed with the power of the mind. This is the greatest thing that has ever happened to me. It has made my hospital stav almost enjoyable. I know I have some kind of control in myself that I was never aware of.

This patient's description is particularly helpful in clarifying the distinction between hurt and pain. She makes it clear that the discomfort was there but that her sense of suffering was diminished and her sense of control was enhanced. She so effectively telescoped her time sense that she actually thought that the procedure had not been completed. One month later, she underwent abdominal surgery and reported minimal preoperative anxiety and postoperative discomfort, which was confirmed by her attending physician. It is notable that this woman with terminal carcinoma found considerable satisfaction in enhancing her sense of mastery over the treatment procedures.

The overall strategy involves making optimum use of the dissociative state to direct focal concentration toward some pleasant sensation in the painful area, such as the tingling sensation; or to interpret the input sensation in an alternative way, such as icy numbness; or to redirect the focal attention to a different sensory input. The major concept is to help the patient set up a psychological filter so that he learns to process the pain experience in a new way. He learns to recognize and exploit the difference between hurt and pain. He does not deny that the painful stimulus is there; rather, he learns, in varying degrees, to ignore it. This process should always be carried out in a medically suitable atmosphere, so that the secondary anxiety, which of course can enhance pain, is realistically allayed. That is, the patient should be assured that the pain as a message has been attended to and that whatever medical procedures are necessary will be carried out.

Migraine

The hypnosis technique for treating migraine headaches is somewhat more specific because of the well-known observation that during the migraine attack, the patient feels warmth in his head and coldness in his hands. There has been speculation that migraine headaches are related to some vasodilatation in the head. Peripheral vasoconstriction with a drop in the temperature of extremities has also been associated with migraine attacks. Therefore, the strategy is designed to provoke psychological and even somatic reversal of this presumed pathophysiological event. There have been reports that hypnosis can facilitate vasodilatation as measured by observation of capillary blood flow, increase of temperature in the hands by several degrees (Grabowska 1971), and vasoconstriction (Dubin and Shapiro 1974). Thus, the trance instructions may provoke circulatory changes.

After the profile has been performed, the patient is told to put himself in a trance state, and the following instructions are given:

While you are floating, at the same time visualize a huge cake of ice, suspended above your head. There is a large hole in the center, large enough for your head to fit into. The ice is now slowly descending from above, covering your entire head, all the way down to your shoulders; and as this happens, you may even develop a shivering sensation. At the same time, in the front part of this cake is an opening, a channel of air, an air tube that permits fresh air to come in so you can breathe. As the air comes through this ice channel, you breathe this cool, icy air and feel it entering your nostrils and your sinuses. It is so cold that you develop an icy feeling inside your head in addition to the icy feeling outside your head. This tingling numbness now enables you to filter the hurt out of the pain, by focusing more on the numbness than on the pain.

At the same time, imagine that you are wearing asbestos gloves on both hands, with tiny wires in the lining of the gloves. The wires are attached to a battery; the battery sends a charge through the wires and warms the gloves up like an electric blanket, and these asbestos gloves are warming your hands. You now have a contradictory experience: The ice is cooling your head, but the gloves are warming your hands; cooling your head, warming your hands. This contradictory experience neutralizes the extreme sensations that take place with the migraine, and by creating this experience, you bring about a sense of relief. You do the exercises every 1 to 2 hours by maintaining this imposed sense of coolness in your head and warmth in your hands, and in this way you can develop a new sense of mastery in regard to the headaches.

Regardless of the degree to which migraine patients can actually alter blood flow intracranially or in their extremities, the combination of this possible physiological effect with the more predictable psychological effect seems to provide considerable comfort. They can learn to abort headaches in the early stages using this self-hypnotic exercise, and they eventually wean themselves off their various analgesic medications. The following case example demonstrates the successful use of self-hypnosis in the treatment of migraines:

A 57-year-old mother of four had experienced migraine headaches since the age of 6. The headaches had become increasingly severe since the age of 30. The typical presentation was a throbbing, left-sided headache followed by nausea and at times vomiting, without paresthesias or visual changes. She had obtained little relief from a complete array of analgesics, including the ergot alkaloids and codeine. She had received intensive neurological evaluation and medical care. Eventually, she was referred for hypnosis.

Her responses to the cluster survey were Odyssean, and her profile score was a 1–4 increment. She was taught the self-hypnosis exercise, and she practiced it diligently. She was somewhat perfectionistic and insisted on a modification of the exercise, preferring to use the image of dental anesthesia rather than ice, with the concurrence of the therapist. One month later, she sent the following letter:

I am making the most marvelous progress, and I can't tell you how happy I am to be able to make this report to you.

I am trying the self-hypnosis technique every 2 or 3 hours and I think it is very effective. To be able to relax at odd moments of the day is very intelligent and I can also see that the method is very successful.

It has been very hard for me to find the time to relax as I am always enormously busy. Sometimes too much so, and then I can feel the tension mounting and my head aching more and more. Recently I played golf for the first time ever without a headache. I have also been playing bridge without any head pain. The only time my self-hypnosis doesn't work is when I wake up with a headache such as 2 to 3 a.m.

I feel there has certainly been a great deal of benefit in a short time and I am certainly enjoying life much, much, more. I feel very optimistic about getting rid of these headaches completely.

Because of this wonderful improvement I am taking much less medication. In the meantime I am gloating, and floating, and getting more and more numb.

During the ensuing 6 years, the patient had occasional migraine attacks that she controlled with self-hypnosis, and she considered herself markedly improved for the first time in her life.

There is evidence that such behavioral techniques are effective (Baumann 2002). The treatment of migraine headaches is a particularly good example of the way in which hypnotic responsiveness is a double-edged sword. Andreychuk and Skriver (1975) found that hypnotizability is correlated with preintervention pain scores. At the same time, hypnotizability was also correlated with migraine pain relief. Thus, hypnotic responsiveness is an effective tool for reducing migraine pain, but unmanaged, it can also be a vehicle for the amplification of symptoms.

Hypnosis With Children

For children, the main focus is on the hypnotic imagery per se rather than relaxation. Hypnotic imagery works especially well with children because they are so highly hypnotizable and easily absorbed in images (Hilgard and LeBaron 1982; Zeltzer and LeBaron 1982). Patients may be guided through the experience while the procedure is performed or may be given a scenario that they later experience hypnotically while the procedure is under way. The latter enables them to restructure their experience of what is going on and dissociate themselves psychologically from the pain and fear intrinsic to their immediate situation.

One successful approach for children with forearm fractures involves having them concentrate on their toes:

Imagine sensations of heaviness and pleasant warmth in the limbs as "all of the muscles in the toes relax...." The clinician then suggests that the patient feel the warmth or heaviness flow up into the feet, then the legs, thighs, etc.... The patient is then told that he or she will feel relaxed, sleepy, and will "travel in the mind to a very pleasant place, perhaps a beach or mountain." A suggestion can be made that the patient will not remember the process of, and pain during, the fracture reduction. (Iserson 1999, p. 54)

This approach was associated with successful forearm fracture reduction in four children ages 3–12 years. "None of them remembered how the cast was applied or any of the procedures in between. They all denied having any pain during their stay in the ED" (p. 55).

Hypnosis is quite effective in comforting children who are in pain, reducing both the sensation of pain and related anxiety (Genuis 1995). Several well-designed studies have shown greater efficacy with the use of hypnosis to control pain than with placebo attention control (Hilgard and LeBaron 1982; Kuttner 1988; Zeltzer and LeBaron 1982). Hypnotic techniques, including telling favorite stories, are quite effective in removing the child from the immediacy of both pain

and anxiety (Kuttner 1988). Hypnosis seems to have advantages over distraction, especially among young children undergoing medical procedures (Kuttner 1988). This is likely due to the fact that children, as a group, are more hypnotizable than adults (Morgan and Hilgard 1972). Their imaginative capacities are so intense that separate relaxation exercises are not necessary. Children naturally relax when they mobilize their imagination during the sensory alteration component of hypnotic analgesia. Indeed, self-management using hypnosis and related imagination exercises is becoming a first-line treatment for such problems as headaches among children (Kuttner 1993).

Although cognitive behavioral techniques are highly effective in reducing pain and distress among children undergoing medical procedures, and although both hypnosis and cognitive behavioral approaches help, there is evidence that hypnosis is superior in reducing anxiety and behavioral indications of distress (Liossi and Hatira 1999). This is empirical support for the theoretical observation that hypnosis is superior to cognitive behavioral techniques for pain control because it goes "beyond simple distraction" (Tan and Leucht 1997). However, the presence of the therapist inducing the hypnosis is more important with children. In one study, the effectiveness of treatment diminished when the protocol shifted from heterohypnosis to self-hypnosis alone (Liossi and Hatira 2003). Hypnosis has also been shown to be effective in reducing chronic pain in children (Zeltzer et al. 2002). Training in self-hypnosis along with acupuncture was acceptable to patients, produced no adverse effects, and reduced anticipatory anxiety as well.

Mechanisms of Hypnotic Analgesia

Recent research indicates cortical effects of hypnotic analgesia exercises, including reduced event-related potential amplitude in response to somatosensory stimuli (De Pascalis and Perrone 1996; De Pascalis et al. 2001; D. Spiegel et al. 1989) and increased frontal and parietal blood flow (Crawford et al. 1993), most notably among highly hypnotizable individuals (De Pascalis et al. 2001). Electrophysiological evidence demonstrates that hypnotic analgesia is not simply another form of distraction (Friederich et al. 2001). In an unusual experiment, direct electroencephalographic recordings from the left anterior cingulate and left anterior temporal cortex provided evidence of reduced somatosensory event-related potential amplitude to painful stimuli during hypnotic analgesia (Kropotov et al. 1997). Rainville and colleagues (Hofbauer et al. 2001; Rainville et al. 1997, 1999, 2001, 2002) delineated differences between hypnotic effects on pain sensation itself versus the distress caused by the pain: sensation versus suffering. In an early positron emission tomography (PET) study. researchers showed that hypnotic suggestion of decreased "unpleasantness" of experimental pain produced reduced regional cerebral blood flow in the anterior cingulate but not in the primary sensory association cortex (Rainville et al. 1997). The anterior cingulate is also implicated in change in expectancy, which is clearly affected by hypnotic instructions in regard to pain experience (Ploghaus et al. 2003). In subsequent work, researchers demonstrated reduced activity in region S1 of the somatosensory cortex during hypnotic analgesia involving different instructions designed to reduce pain intensity rather than unpleasantness (Hofbauer et al. 2001). In particular, the unpleasantness of a painful stimulus is associated with activity of the anterior cingulate gyrus, especially during hypnosis (Faymonville et al. 2000). Faymonville et al. (2003) have further elucidated brain pathways associated with hypnotic analgesia. Using PET, they showed that hypnotic analgesia was associated with an increase in functional connectivity between portions of the midcingulate cortex and other structures involved in pain perception, including the insula and frontal regions-especially on the right-as well as the brain stem, thalamus, and basal ganglia. They propose that the midcingulate cortex can increase interaction among portions of the brain that mediate sensory, affective, cognitive, and behavioral aspects of pain perception.

Thus, hypnotic alteration of nociception seems to involve cortical modulation of pain perception. A recent PET study of hypnotic alteration of color vision provides further evidence of changes in primary association cortex function (Kosslyn et al. 2000). When highly hypnotizable subjects were instructed to perceive a gray-tone grid as filled with color, there was a significant increase in blood flow in the lingual gyrus, the primary brain site for color processing. Conversely, when a colored image was drained of color hypnotically, blood flow in that region decreased. Thus, with hypnosis, believing is seeing, and hypnotic changes in sensation are accompanied by changes in brain

function that indicate an actual change in perception—not merely a change in response to perception.

A third mechanism for hypnotic analgesia involves descending inhibition. Kiernan et al. (1995) showed that hypnotic analgesia is associated with a reduction in the R-III spinal reflex, which involves a reduction in the velocity of conduction in A-delta afferents in the spinal cord. They noted that this change complemented the higher brain changes in somatosensory perception and pain-related distress. Their finding was confirmed by Sandrini et al. (2000), who found that inhibition of the spinal nociceptive flexion reflex occurred among highly but not less-hypnotizable subjects.

A number of studies have tested the idea that endogenous opiates are involved in hypnotic analgesia. But, with one partial exception (Frid and Singer 1979), studies with both volunteers (Goldstein and Hilgard 1975) and patients in chronic pain (D. Spiegel and Albert 1983) have shown that hypnotic analgesia is not blocked and reversed by a substantial dose of naloxone given in double-blind, crossover fashion. Therefore, the cortical attention deployment mechanism is currently the most plausible explanation for hypnotic reduction of pain.

There is evidence that hypnotic responsiveness is a component of other nonpharmacological pain treatments. The ceremony and expectations surrounding acupuncture seem to mobilize hypnotic responsiveness in conjunction with whatever physiological response there is to the acupuncture needles. Katz et al. (1974) used acupuncture for various kinds of chronic, clinical pain and found that acupuncture indeed relieved pain. However, when the patients in this study were administered the HIP, it was found that positive response to acupuncture was clearly related to the profile score. For example, of the 30 patients reporting almost complete pain relief, 19 scored in the 4-5 range on the HIP, and none scored in the 0-1 range. By contrast, among those patients reporting no relief, 5 scored in the 4-5 range, and 12 were in the 0-1 range on the HIP. Moore and Berk (1976) divided patients with chronic shoulder pain into two groups: one treated with classic acupuncture and one treated with an acupuncture placebo in which the needles did not penetrate the skin. They also varied the psychological tone of the treatment settings: One was positive and encouraging, and the other was negative. All of the patients were administered the HIP. Approximately 43% of the patients experienced moderate to excellent pain relief, but there were no significant differences between responses to classic acupuncture

and responses to placebo. The emotional tone of the treatment setting made no significant difference. However, there was a clear relationship between higher hypnotizability and pain relief. Kepes et al. (1976) reported similar results. They found no difference in response to placebo or real acupuncture points with and without electrical stimulation in cases of clinical pain. However, they did find a relationship between pain relief and HIP scores. Gaw et al. (1975) performed a similar study among patients with osteoarthritis. They administered acupuncture at classic and placebo points. There was no difference in results between the acupuncture and placebo groups; both groups showed a significant improvement in tenderness and the experience of pain. A more recent clinical study with a crossover design showed comparable analgesia with hypnosis and acupuncture treatment but superiority of hypnosis for patients with predominantly psychogenic pain (Lu and Lu 2001).

Outcome Data

There are now substantial data indicating the effectiveness of hypnosis in producing analgesia. In a meta-analysis of 18 randomized trials, Montgomery et al. (2000) found a moderate to large effect size (0.74), indicating a substantial reduction in clinical pain. Furthermore, hypnotizability was associated with the degree of analgesia induced, and the effect was only slightly smaller for experimental pain (0.64). Patterson and Jensen (2003), in a major review, concluded the following: "The findings from acute pain studies demonstrate consistent clinical effects with hypnotic analgesia that are superior to attention or standard care control conditions, and often superior to other viable pain treatments" (p. 516). They conclude that hypnosis is similarly effective for chronic pain and is superior to no treatment control conditions: however, in this case, hypnosis is just equivalent rather than superior to other psychological treatments such as relaxation and autogenic training. Numerous clinical reports cite the usefulness of hypnosis in dealing with pain. It has been shown to be effective in treating patients with terminal cancer (Butler 1954; Cangello 1961; Sacerdote 1965), in obstetrics (Kroger and DeLee 1957; H. Spiegel 1963a), in surgery (Bowen 1973; Crasilneck et al. 1956), and in dentistry (Thompson 1963). Bowen's report is particularly intriguing; a psychiatrist, he used self-hypnosis as the sole anesthesia during his own trans-
urethral resection. He reported on his structuring of pain relief and on his sense of comfort during the procedure—and on the surprise and discomfort of his colleagues.

Hypnosis has been successfully used in conjunction with group therapy for cancer patients. In a randomized clinical trial, 50 of 85 women with metastatic breast cancer were offered weekly supportive/ expressive group therapy (D. Spiegel and Classen 2000), which involved building bonds of social support, encouraging the expression of emotions related to the cancer, helping patients "detoxify" fears of dying and death, rebuilding life priorities, improving communication with family and physicians, and training group members in self-hypnosis for pain and anxiety control. This intervention resulted in significantly reduced anxiety and depression, better coping, and less pain (D. Spiegel and Bloom 1983a; D. Spiegel et al. 1981a).

Hypnotic techniques have also proven effective for acquired immunodeficiency syndrome-related pain. Langenfeld et al. (2002) performed a careful analysis of five patients using a sequential procedure involving deep breathing and eye closure, suggestions to let go of muscular tension, formal hypnotic induction, suggestions of going to an imaginary garden, pain relief suggestion, and sleep-related imagery before ending the hypnotic experience. Patients reported improvements that included decreases in pain severity, time spent in pain, and use of analgesic medication.

Hypnosis is also effective in the acute medical setting. It has been shown in a randomized trial in interventional radiology to produce better analgesia than that resulting from patient-controlled analgesia with midazolam and fentanyl, resulting in less anxiety, fewer side effects, and fewer procedural interruptions (Lang et al. 1996). This finding has been confirmed in a larger randomized trial involving 241 patients undergoing percutaneous vascular and renal interventional radiological procedures. Whereas pain increased linearly with procedure time in the routine-care group, it actually decreased over time in the group that was taught self-hypnosis, despite the hypnosis group's use of only half of the analgesic medication used by the routine-care group through patient-controlled analgesia pumps. Most important, the hypnosis patients had fewer episodes of hemodynamic instability, and the average procedure time was 17 minutes (22%) shorter (Lang et al. 2000). This resulted in an average savings of \$338 per procedure, including the cost of the nurse supervising the patient in selfhypnosis (Lang and Rosen 2002).

Similar results have been obtained in several other studies. Faymonville et al. (1997) found hypnosis to be superior to stress-reduction strategies in reducing pain and postoperative nausea and vomiting after elective plastic surgery. Similar to the hypnosis group in Lang et al. (2000), intervention subjects also used less antianxiety and analgesic medication during the procedure, yet rated themselves as having more control and being more comfortable during the procedure. In a quasiexperimental study of 60 patients undergoing hand surgery for trauma, 30 received usual treatment for pain relief and the other 30 received that plus hypnosis (Mauer et al. 1999). The hypnosis group showed significant decreases in perceived pain intensity, perceived pain affect, and state anxiety. Physicians rated hypnosis patients as having enhanced, more rapid postsurgical recovery, and there were fewer medical complications among this group.

Burn-dressing changes are particularly stressful and painful, in part because of their repetition and the patient's accumulation of experience and memory from prior dressing changes, which provides a cumulative context that can enhance distress over time. Frenay et al. (2001) randomly assigned 30 burn patients to either hypnosis or stress-reduction strategies and followed them for 2 weeks. The researchers found that the hypnosis patients had substantially less anxiety before and during dressing changes as well as less pain, although the latter difference was not statistically significant.

Self-hypnosis has also been taught to women who are to undergo labor and delivery (Oster 1994). Helpful techniques include hypnotic rehearsal of the arrival at the hospital and the labor, dissociation, and time distortion, all of which are directed at reducing anxiety and pain.

Although not all patients are sufficiently hypnotizable to benefit from these techniques, two out of three adults are at least somewhat hypnotizable (Spiegel and Spiegel 1987), and it has been estimated that hypnotic capacity is correlated at a 0.5 level with effectiveness in medical pain reduction (Hilgard and Hilgard 1975). Although hypnotizability is clearly an important factor for the use of hypnotic analgesia suggestions (Benhaiem et al. 2001), clinically effective hypnotic analgesia is not confined to persons of high hypnotizability (Holroyd 1996). Pain is a widespread and often undertreated problem (Foley 2000), and hypnosis offers a great therapeutic opportunity. Keep in mind that the higher cortical component of the pain experience is of critical importance: The strain in pain lies mainly in the brain. This page intentionally left blank

CHAPTER 16

Psychosomatic Disorders and Conversion Symptoms

Hypnosis has been used with great effectiveness in the treatment of a variety of psychosomatic and medical disorders (Vickers and Zollman 1999). Problems for which there is substantial evidence of positive effects of intervention with hypnosis include preoperative preparation of surgical patients, asthma, dermatological disorders, irritable bowel syndrome, hemophilia, postchemotherapy nausea and vomiting, and obstetrics (Pinnell and Covino 2000). The accumulation of evidence that hypnosis mobilizes attentional functions in the brain makes its effectiveness in application to somatic problems more understandable: "Recent work suggests that to say that the influence of hypnosis on pain, blood coagulation, inflammatory responses, removal of warts, etc. is simply the result of role-playing or other psychosocial dynamics, is naïve" (Gruzelier 1996, p. 313). Based on evidence that hypnotic induction is associated with loss of discriminability between frequent and infrequent tones using electroencephalogram (EEG) criteria, whereas low hypnotizability increases discrimination, he concludes: "We can proceed to investigate the therapeutic potential of a unique, safe and non-invasive psychological therapy" (p. 316).

The following case descriptions are samples of the vast array of disorders with psychological and somatic components. The psychiatric assessment and the information gathered from the Hypnotic Induction Profile (HIP) provide a picture of the patient's major situational, emotional, and medical problems and personality style. The treatment approach can be constructed taking this information into account to help the patient restructure his or her relationship to his or her body.

Because so many patients benefit from a formal intervention with hypnosis for symptom management and an improved sense of selfmastery, information provided from the HIP can be used to identify a patient's capacity for trance and help predict the most relevant treatment strategies. This information can make a critical difference for patients who are dealing with physical and psychological discomfort (Greenleaf 1992). It has also been demonstrated that highly hypnotizable patients are more vulnerable to acute stress in the hospital setting (DuHamel et al. 2002; Greenleaf et al. 1992). When these patients are identified, staff can provide the necessary support and direction to facilitate their recovery.

Ortega y Gasset commented that "the metaphor is probably the most fertile power man possesses" (Marias 1970). Altering metaphors can be a powerful tool in therapy, just as unrecognized somatic metaphors can cause major disruption in a patient's life. We consider the psychosomatic disorders and conversion symptoms to be on a spectrum, from those with a major somatic component and minimal psychological contribution (e.g., traumatic injury, ulcerative colitis, and hypertension) to those with little or no somatic involvement and major emotional input (e.g., conversion paralysis and non-epileptic seizures). These illnesses are at the crux of the mind-body problem and provide one of the most difficult diagnostic challenges in medicine. The presence of a plausible psychological explanation for somatic distress is by no means proof of causation. Likewise, relief of a somatic symptom, such as pain, with psychological means has been widely misinterpreted as implying that the cause of the pain is functional. Furthermore, most psychosomatic problems are neither purely psychological nor purely somatic. For example, many individuals with non-epileptic seizures also have a real seizure focus that becomes the foundation for elaboration of non-epileptic events (Barry and Sanborn 2001: Irwin et al. 2000).

Many psychosomatic problems can be explained in terms of somatic vulnerability to stress that patients acquired genetically or environmentally, as in asthma and seizure disorders. The situation for hypnotizable individuals under stress is complicated by the fact that even a pure conversion symptom, such as hysterical paralysis, can lead to objective somatic changes, such as muscle atrophy. On the other hand, we argue that some individuals have a psychological vulnerability to the use of somatic metaphor. Highly hypnotizable people seem to be especially prone to the use of somatic metaphors in expressing interpersonal or intrapsychic stress. They are also especially flexible in altering these metaphors (Erickson 1967). The connection between hypnotic capacity and conversion symptoms is often dramatically demonstrated when symptoms occur spontaneously during hypnotic induction (Moene and Hoogduin 1999; Zalsman et al. 2002). Symptoms such as myoclonic movements, pseudoseizures, poorly modulated affect, and difficulty exiting the hypnotic state may occur and can be used therapeutically to teach patients about the hypnotic-like nature of their symptoms and how to control them. If one can make symptoms start, one is beginning to learn how to modify their occurrence, thereby enhancing control over them.

Hypnotizable individuals also have unusual abilities to alter somatic function. Absorption has been associated with greater awareness of internal physiological processes (Zachariae et al. 2000), and thus hypnosis may facilitate both awareness of and effects on internal physiology. For example, just by imagining that they were eating tasty meals, a group of high hypnotizable subjects increased their gastric acid secretion by 243% (Klein and D. Spiegel 1989). After 40 minutes of such hypnotic "eating," one subject said, "Let's stop. I'm full." Conversely, these same subjects could reduce their gastric acid secretion by 40% when just relaxing in hypnosis. Indeed, even after an injection of pentagastrin, which triggers maximal output from the stomach's parietal cells, they had a significant 19% reduction in acid secretion. Thus, imagination in hypnosis can have powerful somatic effects. Similarly, there is evidence that the use of hypnosis to induce relaxation and buffer stress has a variety of positive effects on immune function, ranging from increases in natural killer (NK) cell numbers (Gruzelier et al. 2001) to a reduction in genital herpes outbreaks (Gruzelier 2002). Reductions in genital herpes simplex outbreaks were associated with increases in numbers of CD3 and CD8 lymphocytes, increases in NK cells, and increased herpes simplex virus-specific lymphokine-activated killer activity, along with reduced anxiety (Fox et al. 1999). Bakke et al. (2002) tested effects of an eight-session course in hypnosis for breast cancer patients that included specific instructions for the patients to image strengthening of their immune system. There was some reduction in distress, but only a transient increase in NK cell numbers and no change in NK cytotoxicity. Another trial using seven healthy subjects attempted to use hypnotic imagery to enhance measures of immune function. Most of the subjects were unaffected, but there were increases in expression of two cytokines: interferon gamma and interleukin-2 (Wood et al. 2003).

The potential clinical salience of hypnotic effects on somatic function is illustrated in an intriguing study of hypnotic effects on wound healing. Ginandes et al. (2003) studied 20 women who underwent reduction mammoplasty. Those randomized to a condition involving hypnotic suggestions for accelerated recovery, including

decreased inflammation, visible wound repair, and accelerated tissue remodeling were rated by observers blind to group assignment to have had more rapid postoperative wound healing. In a study with an odd population of 10 healthy volunteers and 4 breast cancer patients experiencing hot flash menopausal symptoms, Younus et al. (2003) found that hypnotic suggestions involving relaxation and blocking of symptoms resulted in improvement. However, there was no randomized control group for comparison. Altogether, these studies suggest that hypnosis may stimulate aspects of neural control over somatic function that has potential for accelerating healing in a variety of illnesses.

Asthma

There are numerous reports in the literature of the successful use of hypnosis in the treatment of asthma. It is not clear whether the pathophysiological condition is caused by or causes the often described emotional difficulty and interpersonal problems associated with asthma, but this seems fairly irrelevant to the effectiveness of a psychological intervention in the disease process. Whether the triggering stimulus is atopic or emotional, a feedback cycle is set up: The patient feels bronchial constriction, which results in anxiety, which in turn results in more bronchial constriction, and so on.

In a rather thorough review of the literature, Kelly and Zeller (1969) reported on a number of studies that indicated the effective use of hypnosis in the treatment of asthma. There seems to be wide agreement that teaching a patient self-hypnosis improves his or her subjective experience of the illness but less hard data showing that the pathophysiological condition improves. The studies of Smith and Burns (1960) and White (1961) support this subjective-objective distinction, indicating clear subjective improvement with no demonstrable objective effect when asthma patients practice self-hypnosis. On the other hand, several other studies reported positive subjective and objective findings, including complete remissions (Brown 1965; Edgell 1966; Edwards 1960; McLean 1995; Moorefield 1971).

Maher-Loughnan (1970) reported on a series of studies in which asthma patients using self-hypnosis exercises that emphasized confidence building did better than control subjects who simply did breathing exercises. There was a clear difference in subjective response, favoring the patients taught self-hypnosis, although both groups improved. There was a smaller but significant difference in measured vital capacity. Maher-Loughnan found age difference to be of no significance in the responders. The nature of the triggering stimulus was irrelevant to patients' responsiveness to self-hypnosis. Maher-Loughnan also found an extremely low incidence of symptom substitution, which was estimated at 1.5%, and new symptoms were mild and transitory. It is noteworthy that Maher-Loughnan found that the group taught self-hypnosis did significantly better than a group that used only an inhalant bronchial dilator.

There is considerable evidence that self-hypnotic exercises can be of significant benefit to patients with asthma. In many of the previously cited studies, patients were taught rather lengthy self-hypnotic exercises that lasted from 15 to 60 minutes and that emphasized a general sense of building self-confidence. Our approach differs somewhat in that we emphasize brief and frequent self-hypnotic exercises, every 1–2 hours for 1 or 2 minutes, and whenever anxiety or wheezing increases.

After the appropriate history is taken and the HIP is performed, the patient is taught to put him- or herself in a trance and is given the following instruction:

As you feel yourself floating, imagine that the tubes in your lungs are slowly opening up, and cool, fresh air is entering them. As you feel yourself floating with these cool breezes coming into your lungs, you develop a tingling numbness inside your lungs and an opening of the bronchial tubes. By concentrating on this floating sense and on the feeling of a cool breeze in your lungs, you enable your lungs to open up. In this way, you will find that each breath is a little deeper. Every time you take a new breath, you find that you're able to inhale a bit more deeply, and you feel your lungs opening up and getting wider and wider.

The patient is taught to do this exercise for him- or herself, and it is emphasized that it is something he or she can do when an asthma attack is developing. This exercise provides both relaxation and distraction for the patient. He or she is encouraged to use this exercise as a first resort, before reaching for the isoproterenol inhaler, as in the following example.

Carol was first seen when she was 16 years old and had been admitted to the hospital for the third time in as many months

in *status asthmaticus*. She had a history of asthma and various atopic sensitivities from the age of 6 months. She had been maintained on a standard anti-asthmatic regimen, including decongestants and isoproterenol inhalers. She led a somewhat limited but active life, but during the preceding several months she had clearly decompensated.

Before this particular admission, Carol had been twice unresponsive to subcutaneous epinephrine. When examined by the author (D.S.) she was wheezing audibly and was quite uncomfortable. The standard medical treatments had all been tried, short of intubation and general anesthesia. Because she had a high eye-roll finding (3), a rapid induction was performed without formal testing of trance capacity. A simple instruction was given that with each breath she would find that she could breathe a little more deeply and more easily. She was told to develop a sensation of floating. Within 5 minutes, she was resting in her bed rather than sitting upright, and her wheezing, though still audible, had diminished.

It is not incidental that this approach was taken in the face of the failure of medical treatment. The author, at the time a medical student, could not think of any useful additional medical procedure. It is still not clear whether the trance induction did more to relieve the author's anxiety or Carol's. It is clear that she responded and that we avoided the danger of more heroic medical treatment, which can often occur in response to the anxiety of the physician.

Carol, who turned out to be a mid-range subject (an Odyssean personality type), was taught self-hypnosis, and she regularly practiced an exercise similar to the one just described. She was released from the hospital several days later and had one remission shortly thereafter, but had none in the following 7 years. She thought that the self-hypnosis was quite helpful, used it more or less daily, and thought of it as a first resort before turning to isoproterenol inhalers.

It is difficult to evaluate the role of hypnosis in Carol's improvement as compared with medication, because she had also been intermittently on prednisone and an experimental drug called Intal, which seems to prevent release of histamine and similar bronchio-constricting agents from mast cells on antigenic challenge. The least we can say is that the use of self-hypnotic exercises did not interfere with her medical regimen, and it gave her a sense of mastery over her illness—to the extent that she trained to be a respiratory therapist. It seems likely that by resorting to self-hypnosis when she felt her chest becoming tight she also reduced her use of isoproterenol, which has been implicated in occasional episodes of sudden death (Goodman and Gilman 1975; Lockett 1965).

Self-hypnosis seems to be particularly useful in aborting the "snowballing" effect of the anxiety that follows an initial physiological danger sign. A patient with asthma may sense a bit of constriction due to an atopic or emotional stimulus. Then he or she reacts with anxiety about the consequences, which serves to enhance the constriction, and so on. The hypnosis exercise is a way of acknowledging the initial problem while avoiding panic. The patient shifts attention toward floating and re-establishing mastery over his or her body in a gradual manner. The exercise, properly taught, thus expands the repertory of choices available to an individual with a psychosomatic problem such as asthma.

Similar techniques have been successfully used with younger children as well. In one study of a preschool asthma education program that used storytelling, imagery, and relaxation in a hypnotic context, significant improvement in symptom severity and reduction in physician visits for asthma were observed (Kohen and Wynne 1997). Parents were trained first in the use of self-hypnosis, and then children joined in a subsequent class that emphasized the following imagery that would induce relaxation in the lungs: "Twinkle is your friend and very special...and Twinkle has a magic bell...and Twinkle can go down to your breathing tubes and see the muscles there and touch them with the magic wand and let those muscles get all loose and floppy...and then the breathing tubes can be wide open...and all the air you want and need can go in ... and out ... nice and easy ... it feels soo good...Twinkle can do that for you" (p. 173). The joint participation of parents with children is an especially helpful part of this approach, and there was evidence that parental expectation was a predictor of outcome as well. Another study of children with chronic dyspnea who were taught self-hypnosis found that 13 of 16 had resolution of their problem by the end of the hypnosis training (Anbar and Hehir 2000). The children were taught relaxation and the use of imagery specific to their shortness of breath (they imaged how their lungs looked in a dyspneic state and then changed them to a normal state). Similar positive results were reported in a study of 49 children with cystic fibrosis who were taught self-hypnosis (Anbar 2000). Techniques taught included relaxation, pain relief, headache control, changing the flavor of necessary medications, and control of other

disease-related symptoms. Successful use of self-hypnosis was reported by 86% of the patients, and a third of them reported using the selfhypnosis exercises for half a year or longer.

Gastrointestinal Disorders

There is a strong clinical research literature demonstrating the effectiveness of hypnosis in controlling symptoms of irritable bowel disease, including pain, bloating, diarrhea, constipation, and frequency of bowel movements (Colgan et al. 1988; Whorwell et al. 1984, 1987). Hypnotic instructions include suggestions for "overall physical relaxation, gut-specific relaxation, reduced perception of life threat, and lessened attention to gut discomfort" (Palsson et al. 2002, p. 2607). Improvements in irritable bowel disease when hypnosis is used do not seem to be related to changes in pain thresholds. smooth muscle tone in the rectum, or measures of autonomic nervous system activity (Palsson et al. 2002). Cognitive changes in how patients viewed their disease were more robust with hypnosis therapy and were related to good outcome, however. Thus, hypnotic suggestions regarding potential improvement in bowel symptoms, stress management, and reduced threat from irritable bowel disease seem to result in improvements in key specific symptoms (Galovsky and Blanchard 2002).

Similar results have been obtained in the treatment of functional dyspepsia (Calvert et al. 2002). Hypnotic suggestions included muscle relaxation and disease improvement using tactile and imagery techniques. Patients with dyspepsia seem to benefit from having a visual image of the inflamed mucosa as it is healing. Patients may be asked to place their hand on their abdomen and imagine a reduction in symptoms. In the Calvert trial, patients stopped using medication yet had less pain and nausea and improved appetite along with less overall distress.

Hypnosis is also helpful in improving both anticipatory and postoperative nausea and vomiting (Enqvist and Fischer 1997; Marchioro et al. 2000). Effective hypnotic techniques include inducing physical relaxation and imagining being in pleasant surroundings, which tends to disrupt the conditioned association between the hospital environment and nausea. Sometimes imagining a pleasant aroma, such as a lemon, can counter nausea associated with other smells, or direct suggestions of hunger and thirst can counter nausea. Clearly, the ability of the hypnotized individual to control various aspects of gastrointestinal function shown in the laboratory has clinical utility.

Pigmentary Glaucoma

The following case description provides an illustration of two basic themes related to hypnotizability: an individual's considerable capacity to influence physiological events and the ripple effect.

Joann asked to be seen by the author (D.S.) with a rather unusual complaint. She had been diagnosed as having pigmentary glaucoma some 18 months before presenting for an evaluation of her hypnotizability. She had been warned by the physician who first made the diagnosis that she could go blind and that the loose pieces of pigment in her eye could do more damage if her ocular pressure was elevated. Joann was frightened by this and quickly became aware that her eye pressure seemed to increase when she was upset. She had been in group therapy for the previous 6 months and had found it helpful. She had learned from it that she tended to focus on her eyes when she became upset and then to worry about that, setting up a vicious cycle. She had tried voga, which she said was helpful in reducing her ocular pressure. In spite of that, she had been quite upset during the preceding few months, and her increasing pressure had forced her to resort to medication to lower it. In this context, she wanted to explore whether self-hypnosis could help her control the pressure.

The HIP was performed, and she scored 3–4. She was amused and surprised by her capacity for entering a profound trance state. As we discussed her trance capacity, an interesting history began to emerge. Joann had always considered herself quite unstable emotionally, an opinion that she thought was shared by many of her friends and family members. In the past, she had had many physical ailments, including joint pains that lasted for months, a period in college of what she

described as anorexia when she ate very little in an extreme effort to lose weight, and a period of partial deafness. The latter occurred when the doctor who diagnosed the pigmentary glaucoma mentioned that ear trouble often accompanies it. As Joann described it: "I suddenly started feeling pressure in my ears, as though they were filled with fluid. I couldn't hear low voices and thought I was going deaf. The doctor insisted it was strictly functional." By this time, it was becoming clear that Joann seemed to be describing a capacity to spontaneously shift into trance modes and soak up other peoples' speculations as though they were instructions. She was able to transform the concern of others into a physical experience.

As an experiment, Joann entered the trance state, and I suggested that she would have difficulty hearing anything except my snapping fingers, which would signal the end of the period of difficulty. On coming out of the trance state, Joann noted that things did indeed sound dimmer, although she could still hear them. She went on to say: "I don't know why-it may be related to your suggestion. Things did sound sharper when you snapped your fingers. I felt myself going into my old state. You know, I had had a confrontation with my sister after 5 years of not seeing her. She said some things I didn't want to hear-that I had no right to be happy." She went on to agree that she tended to use body language to express things; in this case, the combination of not wanting to hear what her sister said, along with not wanting to hear and at the same time accepting in the extreme her doctor's rather blunt bad news.

She went on to describe herself in this way: "I pick up suggestions. When that doctor suggested I might go blind, I went into a depression worrying about it. Then he mentioned ear trouble. I am generally more anxious than depressed. I look for people to rely on. I like to please them. It is hard for me to say no." She described an incident in college when a close friend died of a particularly grim disease that necessitated amputation of both legs before the girl's death. Joann began to feel pains in her legs and was certain for a while that she had the same illness.

What she described about herself was quite consistent with the way other Dionysian personality types describe themselves. She mentioned the desire to please, the capacity to pick up suggestions, and her proneness to use body language in a literal sense. Her vulnerability to anxiety and depression was also consistent.

She was taught an exercise in self-hypnosis that involved two parts. The first part was an exercise in floating and developing the sense that with each breath she exhaled a bit more tension out of her body. But the primary focus was on the floating. The second part involved seeing a movie screen in front of herself on which she could visualize any problems, people, or events that were on her mind. In this way, she could continue to think and feel freely about what concerned her but at the same time could leave her body in a state of restful floating. She was instructed to do the exercise every 1–2 hours.

She returned several weeks later and said that she had been doing the exercise about five times a day: "Sometimes it doesn't work, but often it does. It is a different feeling from meditation [which she also practiced]. I get a tingling in the back of my neck like when I'm going to have an anxiety attack, but I don't have one. I feel I have control." A follow-up 3 months later revealed that her eye pressure had returned to normal from its previous level of approximately 50% above normal, and her doctors were planning to discontinue topical medication. The ophthalmologist had commented: "Your pressure is surprisingly good. When you're relaxed, things go better." Although the role of the medication could not be discounted, both Joann and her physician seemed to feel that her capacity to control her state of mind had had a positive influence on controlling her ocular pressure.

A ripple effect also began to appear. Joann found herself speaking out with people around her in a way she had not before. She gave one particularly notable example: "I've always had skin trouble. But one day I noted that my skin was particularly itchy and that I had a rash. I decided to try the exercise to stop it, and sure enough, within 10 minutes it wasn't itching. But then I noticed something else. I began to feel angry. I realized that I had been angered by something one of the people I live with did, and I told the person off. The rash no longer itched, and the anger went where it should." Thus, Joann was learning to control and translate her body language into English; to make more direct use of her affective responses, with less concern about pleasing people and less preoccupation over her somatic problems.

Joann was seen only three times altogether for the work with hypnosis. She continued in group therapy. She learned self-hypnosis easily and used it not only to control her somatic problem but also to gain a new perspective on her style of relating to herself, her body, and her friends. This brief encounter seemed to have the effect of enhancing her capacity to reflect rather than to comply with others, and also to give her a sense of mastery over her somatic representations of her feelings. She clearly remained quite hypnotizable and had learned something about using her capacities—choosing when and when not to use them.

Follow-up of Joann's treatment with hypnosis revealed that 4 years later she was having no significant problem with her vision. She still used eyedrops but at a reduced amount and had only occasional episodes of soreness in her eyes and interference with her vision. She interrupted her regular treatment with doctors because they were so critical of her use of hypnosis and other techniques such as meditation and yoga in controlling her eye pressure. She reported that her sense of tension and pressure around her eyes and her overall state of relaxation were much better. She had stopped formally using self-hypnosis for several years but recently had resumed using it as a relaxation exercise. She noted that after she used self-hypnosis she felt "very lighthearted."

She also commented on the perspective of herself that she gained in recognizing her high hypnotizability: "It helped me understand a lot of the reactions in my marriage. It was really a central insight. I seem to be attracted to people who are cool and rational, often to a person who denies a lot of his feelings. I also find that I haven't somatized my feelings very much recently but when I have, it has been useful."

In summary, Joann made good use of her three visits, both to achieve considerable control over her physical symptom, which was related to her general level of tension and anxiety, and also to view in a new perspective her tendency to somatize feelings and seek out relationships with people with Apollonian characteristics.

Contractures of the Hand

John was a 39-year-old bricklayer who had a compound fracture of his index finger when a defective ladder collapsed on his hand. The fracture healed poorly, and he experienced a great deal of pain. This led to a period of prolonged disability and eventually to depression. Unemployed for several years, he lost his job, his home, and his wife. He developed contractures of all of the fingers of his hand and had significant muscle wasting, with the circumference of his affected left forearm becoming 4 cm less than the healthy right hand. He was sent to a therapist who decided that this was a pure conversion disorder and that the hand represented a fist expressing his anger at his employer. He abreacted his anger in and out of hypnosis, with no improvement.

He was then followed by investigators for his insurance company, who had become convinced that he was malingering. They never found proof of this, but the insurer insisted that he have the originally fractured index finger amputated, or he would "never have a useful hand." They threatened to cut off his disability benefits if he did not comply. The surgeon to whom he was sent, Dr. Robert Chase at Stanford, did not think an amputation was indicated, and sent him to one of us (D.S.) for help with hypnosis. I told him that I did not know why his hand was so badly malfunctioning but pointed out that he had poor circulation and loss of muscle mass and offered him a rehabilitation program. He was moderately hypnotizable (3 soft pattern, induction score of 7). In hypnosis I told him he would develop tremors in his hand that would build up strength and circulation. He readily did this, practicing for 30 minutes a session several times a day. After 3 months, he had full extension of all fingers except the injured one. Dr. Chase applied a spring-loaded dynamic splint to that finger. John practiced so hard building up strength with an old tennis ball that he actually ruptured some ligaments. However, by the end of a year of treatment, now 3.5 vears after the original injury, he had virtually full motion of the hand. He brought in a brick to show me that he could now hold it, and he resumed work, but only after having to sue his insurer, which did not believe that he was actually rehabilitated. He was proud of what he had done and eagerly showed the medical students at Stanford how he had regained function of his hand.

This case is more fully described elsewhere (D. Spiegel and Chase 1980). The key element was not putting the patient into a situation in which he would be humiliated if he improved, somehow proving that the problem was "all in his mind." He had a problem with somatic and psychological components, and a rehabilitation approach coupled with self-hypnosis helped him to effectively restructure his understanding of his problem and how to overcome it.

Pruritus

K.H. was a 27-year-old married salesman. He had a 21-year history of itching and scratching on his hands and legs, with consequent chronic dermatitis. Eczema had been diagnosed at age 7, for which he had been given intermittent medication. He had been treated by a dermatologist, and the dermatitis had improved, but the pruritus remained.

He happened to be at the dermatology clinic on the day of the hypnosis course at Columbia University and was invited to be seen in front of the students for consultation and treatment. His profile score was an intact 3. He was taught self-hypnosis and while in trance was instructed to imagine a tingling numbness and to concentrate on that as a means of transforming the sensation of itching into one of tingling numbness. As he was in the trance, he reported that he could feel the tingling and with surprise commented: "I hear bells ringing!" After he came out of the trance, he interrupted a general discussion of the treatment approach with: "Do you realize what has happened here? My itching is gone!" Four-year follow-up revealed that the itching was still being controlled using the same exercise and that the dermatitis had disappeared.

This result is consistent with an interesting case report of the successful hypnotic treatment of a woman with a 3-year history of a vaginal and anal itch (Rucklidge and Saunders 1999). The patient was hypnotized and given training "that involved developing an image of the itch (including details of its color, shape, weight, and texture) and then introducing suggestions of how Ms. D. might alter the itch image. Suggestions included images of reducing the intensity of the itch color, replacing the itch color with a more soothing one, modifying the itch texture, soothing the itch sensation with wind or water, attaching a metaphoric thermostat to the itch, and gradually imagining controlling this thermostat to reduce itch intensity" (p. 356). The patient reported considerable improvement in itching, distress, and sleep disturbance.

Bruxism

S.N. was a 42-year-old businessman who was separated from his wife. He had a 30-year history of intermittent facial tics and a 1-year history of bruxism (teeth grinding) that had produced serious dental problems. His profile score was a 2–3 intact, and during the first and only treatment session he was taught the "movie screen" technique. He was instructed to float and relate his thoughts and feelings on an imaginary screen, thereby allowing the muscles throughout his body, including his jaws, to relax. Even though the bruxism occurred primarily during sleep, his hypnotically induced relaxation with the screen technique during the day enabled him to eliminate the muscle tension during sleep over a period of 2 months. A 5-year follow-up revealed that he was still free of the symptom. He referred to the treatment as "instant yoga."

Psychogenic Urinary Retention

In the following case of psychogenic urinary retention, the patient was taught to maintain a sense of floating relaxation and thereby avoid the metaphor of fighting her body or of forcing herself to urinate. Instead, she was invited to float, relax, and allow it to happen. The patient had reported that the place where she was best able to urinate was her own

bathroom at home. Therefore, part of the instruction was that in the trance state she would picture herself in her bathroom at home. This principle has general application in constructing a strategy: It is very useful in taking the history to find out the "home remedies" that seem to work best for the patient. These remedies often provide the therapist with metaphors that are particularly appealing to the patient and that may be incorporated in the trance approach. For example, the fact that this patient had reduced anxiety when in her own bathroom was used to create an atmosphere, wherever she was, that was most conducive to relaxing her urinary sphincters.

Beth was a 26-year-old married woman who was seen once by the author (D.S.) for the treatment of chronic urinary retention. Her difficulty was most acute in strange and especially large public bathrooms. She had gone for as long as 24 hours without voiding and had required catheterization several times. Previous medical workups indicated no organic disturbance. She took no medication.

Beth had had this problem in one degree or another for 20 years. She attributed its beginning to a warning from her mother during a vacation trip not to sit on strange toilet seats. At this time, she watched her mother urinate while squatting and developed an inability to urinate away from home. She remembered having to call her father to pick her up from a friend's house so that she could urinate at home, but she also remembered times when he did not come to get her until the next day, leaving her in considerable discomfort. As she grew up, she developed an ability to urinate in unfamiliar bathrooms as long as they were not large and public. She was also unable to urinate on camping trips.

Beth was an only child. She reported being rather "repressed" around the issue of masturbation but recalled obtaining pleasure as a girl from "rubbing my thighs together with a full bladder." She had been married for a year, after having lived with her husband for several years before that. She said they got along well and that their sex life was very good. She noted that her husband was understanding about her problem on trips, although he showed some displeasure when they had to cut short or avoid a trip because of her inability to urinate. She was a college graduate and denied any other significant psychiatric problems. Three years previously, she had had several sessions with a psychologist who had used hypnosis with her. Although she could not remember the details of the procedure, she said it did result in "significant improvement."

Beth was evaluated by another psychiatrist and referred for treatment using hypnosis. She was seen once. The HIP was performed, which indicated that she was an intact 1–2. This score made it clear that she was on the Apollonian side. She was taught to hypnotize herself and was given a two-part exercise to do every 1–2 hours at first and when she was in the bathroom as well. She was to picture herself in her own bathroom at home, where she was comfortable urinating. She was also to concentrate on the sensation of her hand floating in the air: The idea of this part of the self-hypnosis was to have her stop the endless transformations stemming from avoidance of urinating so she could recognize the paradox of forcing herself to let go. The concentration on her hand floating emphasized her mastery over her body and how such mastery felt without the sense of forcing herself.

Immediately after the exercise, she said: "I think this will be helpful—I feel more relaxed." She then provided a fascinating description of her bathroom at home. She said that at first she had thought of her parents' bathroom during the exercise, but then had pictured her own: "It's like a zoo, full of stuffed animals." The unconscious sexual and dependency implications of her symptom seemed intriguing, but she had no interest in pursuing them, so we did not press the issue.

A follow-up telephone call 1 month later brought a report of "no problems." She had taken several short trips and had urinated without major difficulty. She had been doing the exercise several times a day and said that she had been able to bring about a feeling of relaxation. She also recalled at this time that whenever she had had such problems as a child she had to return home to void but that she had modified the difficulty when she went to college. She said she was planning a long trip with her husband and that this would be the real test. She wrote a letter after this trip, which occurred 3 months after her visit. It is reprinted in entirety:

Sorry I didn't write sooner, but I have been pretty busy. The trip went very well. It almost seemed as if I never had had a problem. It just takes the right kind of effort now (but in most circumstances, it does take active effort to allow myself to go). Basically that's what it boils down to—whether or not I let myself go (or *can* let myself). In any case, *now* I am in much more control, and much more comfortable than I've ever been. It took ten years, total, to alleviate the problem one step at a time.

Yes, your exercise was positive, but I never used it specifically the way you told me to. I never had to. I would use it mostly in the car, and also got into the habit of giving myself a subconscious (in the hypnotic state) pep talk every so often—part of the practice. I think that was the most helpful thing of all. The right frame of mind is paramount, but now I have the right frame of mind. That's about it, I guess. Now I hope this will be some help to you in treating others. My sincere thanks for your willingness to help me.

Several things are notable about this letter besides the obvious improvement in the symptom. The key things are her emphasis on control and her predictable modification of the exercise. Both of these elements are characteristic of Apollonians. Someone highly hypnotizable might accept the exercise in its entirety and do it to the letter, but Beth extracted what she wanted from the protocol. She assimilated the exercise, critically evaluating which parts were useful to her and which were not. It also is interesting to note that in spite of the dramatic change that she describes, she is careful to report it as gradual ("It took ten years, total, to alleviate the problem one step at a time") and related her success to past more than present efforts. Thus, she demonstrates the past-future time orientation so characteristic of Apollonians.

She gave no evidence of symptom substitution but rather seemed to feel proud and happy. She had experienced a sense of mastery: This aspect of the restructuring technique cannot be overemphasized. People with functional physical disturbances often are treated gruffly by physicians and family members, who imply that the person is faking the illness in some way and should just "snap out of it." This position has just enough truth to it to make the patient angry and defensive. If she were simply to stop having the problem, she then would feel somewhat sheepish, the implication being that she should have done it a long time ago and saved everyone much trouble and expense. But this learning model involves teaching the patient something new. It thus provides a face-saving way out of her dilemma. Indeed, the patient is learning something new—that she has more control over her body than she thought, if less than she (and others) would wish. Thus, the patient can overcome the problem with a sense of mastery, as illustrated in Beth's case, rather than embarrassment.

In this context, secondary gain must be mentioned. Beth showed relatively little evidence of secondary gain. She had taken the position, especially as she got older, of fighting the problem rather than giving in to it. She had compromised with it but had refused to allow it to interfere in a major way with her education away from home or with her social life. Thus, she was ripe for further change. There are people for whom the secondary gain factors make changes more difficult. Beth's husband's attitude seemed particularly helpful; he was at once understanding and openly annoyed when the problem began to interfere with their activities.

This case illustrates that a restructuring strategy that helps the patient strengthen his relationship to himself and his body by making the problem part of this relationship is useful to people with little trance capacity. Such people extract and make good use of the parts of the exercise that are meaningful to them.

Dysphonia

We now proceed further along the spectrum toward the more clearcut conversion symptoms, such as dysphonia, in which somatic dysfunction is minimal and the psychological or metaphoric component is primary, as in the following example.

K.U. was a 52-year-old, single businesswoman who lived with two sisters, a brother, and a nephew. She developed a dysphonia and was sent to New York by her company for evaluation and treatment. The president of the company was personally concerned. He was willing to underwrite the cost because he valued her as an employee and feared that retirement would be necessary if her problem was not resolved. She was seen by the author (H.S.) for 30 sessions over a 6-week period after medical examination revealed no organic pathology.

The patient noted increasing difficulty in speaking over an 18-month period. When she sought help, the dysphonia had

progressed to the point at which she could barely whisper. It had not progressed to the point of being an aphonia but, as the patient described it, she needed help to "get the noise out." She had consulted with a psychoanalyst for 2 months but became discouraged and stopped treatment when he told her that the dysphonia was a sign of sexual frustration.

During the first session, her profile revealed her to be an intact 2–3. She was highly motivated and insisted on daily treatment sessions. During the second session, a two-pronged treatment strategy was undertaken, involving restructuring of metaphors and further data gathering. She was asked to lie on the couch, and she was placed in a trance and told the following:

- 1. You seem to regard speech as noise.
- 2. The symptom is a statement that you are in despair about something.
- 3. As humans, we all have our share of faults and virtues.
- 4. You seem to be out on a limb—here is your chance to come down to earth.
- 5. We will start by pretending you are a little girl—let's sing songs together.

The therapist spent the remainder of the session singing nursery rhymes and the ABCs with the patient. During this first session, she produced very little phonation other than a whisper. She was told that this exercise would be continued at each session and was encouraged to practice. She left feeling somewhat disappointed, and she cried that night.

The subsequent two sessions were devoted to this kind of regression (metaphorical or pretended, rather than an actual hypnotic regression, as one would expect with someone who scores a 4 or a 5 on the HIP), and she began to report dreams.

The first dream was the following:

I went to a party, didn't know the people there. They served cocktails. I wondered if I should take any since I was on medication. I suddenly discovered that the home of the party was on a precipice, that the only way down was by steep steps, and that my only phobia was height— I couldn't look down. I wondered how I would get down. She associated to the dream: "I enjoyed the party until I was aware of the steps—then I was scared to death."

At the fifth session, she reported this dream:

I had gone home and learned that our pet dog was put away by the vet. He was 14 years old. My sister said, "We got a new pet—it's in the bathroom." I went there and saw a snake in the bathtub. I felt I didn't care what happened, but we had to get rid of it.

She awoke with a feeling of revulsion, and reported thinking, "I don't think a snake would hurt me, but I don't want to be near one."

The therapist chose not to discuss this dream further, but took it as a warning not to discuss the sexual theme. This dream seemed to be a clear enough message regarding the patient's first experience in psychotherapy. She commented later that she had made her peace with remaining in unmarried spinsterhood and added, "If I wanted to pick up a man, I could certainly do it."

The singing continued, and she gradually developed islands of phonation that grew in duration. By the eighth session, she said, "I now accept this symptom as emotional." At the ninth session, she experienced the first clearly phonated sounds in 18 months while singing the ABCs. This transition was followed by another dream:

I was home Sunday morning, then went to church. I thought I was outside the door of a nursery. People came with a baby. People fussed over the baby, but it did not respond. Then I went to the baby. It responded to me and reached for me. I awoke and felt wonderful.

Her associations to the dream were: "I am secure in church and I often visit the nursery. The babies like me—there are very few children who can't make friends with me." By this point, the patient had accepted the symptom as a statement of an emotional conflict and was making progress, but the message was not yet clear.

What soon emerged was that the key conflict was not sex but power. She had been promoted in her company from elevator operator through a series of positions to one of considerable managerial responsibility. There were two men working under her who had exploited her diligence and reputation for being kind and considerate. She had found herself doing increasing amounts of their poorly completed tasks to protect them and to represent the work of the department well. As she put in more and more overtime, she was increasingly enraged at them but unable to express her anger.

It was in this context that the meanings of the first and third dreams became clear. Her fear of heights was a metaphorical statement about her anxiety concerning her high position at work. She did indeed fear what was beneath her these two employees. The third dream expressed both a wish to be liked by those under her and her confusion of that wish with her acceptance of herself. Feeling unlikeable, she had hesitated to say anything that would arouse overt dislike from her employees. The regression and singing exercises had put her in touch with a warmer, more accepting feeling about herself. From this new position of security, she was able to acknowledge her fear and anger toward those two men beneath her in the organization.

This impression was confirmed by the report of her Rorschach test results, which was read to K.U. It included statements about "exaggerated guilt in relation to any aggressive or sexual impulse, depression, and denial." The tester went on to note: "She also is guilty and anxious because she sees herself as competing with the mother and other feminine objects. In order to avoid this aggressive competitive relationship, the patient tends to regress and to adopt the role of the little girl who need not face adult problems. At the same time, there certainly is considerable ego strength here."

The patient began to focus on her problem at work. She was able to accept responsibility for what happened there and formulated a plan for doing something about it. As she left the therapist's office for the last time, she commented in a clear voice, "There are a few gentlemen back home who will not be glad I have my voice back."

She wrote a month later, indicating that she had been home and at work for 4 weeks and was feeling fine. "Nothing is changed except me." She was promoted at work and retired several years later. Follow-up 14 years later revealed that she continued to do well and had no symptom recurrence. This treatment required some 30 sessions over a 6-week period and thus was considerably longer than our usual symptom-oriented treatment approach. In this case, defining the problem and then applying the proper puzzle form was a complex issue. The nature and timing of the symptom suggested that its metaphorical meaning required attention for rapid resolution to occur.

Facial Tics

J.D., an infantryman overseas, was startled by a loud mortar explosion in combat and was knocked unconscious. When he was evacuated to a clearing station and treated for his minor surgical wounds, he also noticed that he had developed a diffuse facial tic in which his eyes closed, presumably without control, and his shoulders hunched up. The facial movements, eye closure, and hunched shoulders all suggested a constant repetition of his defensive gesture against the explosive noise. This tic continued for several weeks as he was being evacuated to the States. He was given a medical discharge and permitted to return home, but he refused to leave the hospital because of the embarrassment of these tic movements. He said he would be unable to face his family, especially his girlfriend. With that new set of motivations, he was re-admitted to the hospital and assigned to another treatment unit, where he was found to be hypnotizable.

In the trance state he was given this message: Although it was still important for him to carry the defense against the threat to his life, because of the distance from it, he could now transform this traumatic event into a hyperactive movement of his left big toe. To demonstrate this kind of control, he was given the opportunity over several days to come out of the trance state and first move the tics only to the right side of his face and then to the left side of his face. Then on other occasions he moved the tics from his face and shoulders down to his abdomen and legs, then to the right leg, then to the left leg, and finally to the left big toe. The concept was that he could control the tics by shifting the locus and then moving them downward to his toe, which gave him a sense of mastery. The thesis behind the treatment strategy was that by establishing control over the defensive symptoms he would be able to totally master all movements, even the symbolic movements of his left big toe. In fact, this is what happened.

One year later, he wrote a letter saying that he was employed as a civil servant in the Veterans' Administration and had married. He included the interesting observation that, although he felt well, every once in a while when he had periods of anxiety, he had peculiar movements in his big toe. The way he mentioned this in the letter indicated that he had amnesia for the structure of the whole treatment program but had accepted the gradual phasing out of the exaggerated movement to a symbolic minimal statement. With his new level of security, he was able to phase out the symptom entirely except for occasional episodes of anxiety.

Although this patient was seen many years before the HIP was developed, in retrospect we estimate that he would have scored high and was probably a grade 5.

The case demonstrates the importance of secondary gain and loss. When J.D. was about to leave the army and go back to civilian life with an honorable medical discharge, he confronted himself with the potential embarrassment of the tics. He consciously or unconsciously no longer wanted to extract whatever secondary gain factor was present while in the military. Thus, he demanded treatment for control of the symptom before returning to his family and his girlfriend, where he would have encountered significant secondary loss if the symptom had persisted. Because the timing was so appropriate, showing him how to shift the symptom from one part of his body to another taught him a sense of mastery over the symptom that eventually enabled him to control the symptom entirely and thus abandon secondary gain and avoid the secondary loss in self-respect.

Hysterical Paralysis

D.L. was a 40-year-old divorced mother who was hospitalized with a spastic paralysis of her left leg after surgery for repair of presumed disc disease. Two years earlier, one of her two sons had developed pancreatitis and died a year later after a painful and debilitating illness. Friends commented that the patient shed no tears at the funeral but that she remained withdrawn. In an effort to cheer her up some months later, they invited her to a party in her honor. At the party, she slipped and fell, apparently injuring her back. A surgeon diagnosed disc disease, and a laminectomy was performed. When taken out of traction, her left leg was paralyzed and rigidly inverted. A variety of treatments were used without benefit. She was hospitalized on the orthopedic service when a psychiatric consultation was requested.

Her hypnosis profile was an intact 4. In the trance, she was instructed to develop tremors in both legs, which commenced and continued after the trance. This movement helped to diminish the edema in her left leg, which was 2 in. larger in circumference than the right. After 3 months, the edema disappeared, leaving her left leg 1 in. smaller in circumference than the right leg due to muscle atrophy. Her movement gradually returned with physiotherapy, and after adhesions in her ankle were repaired, she was able to resume walking normally in another 6 months. During this time, muscle exercises were performed daily in a self-induced trance state, and she was also encouraged to express her grief at having watched her son slowly weaken and die without having been able to do anything to alter the course of his illness.

Her metaphorical wish that she could have taken his suffering on herself was expressed somatically. This ventilation of feeling, in addition to insight regarding the metaphorical significance of her disability and a renewed interest in caring for her other child, enabled her to overcome the symptom.

In the following case also, recognizing and interpreting the metaphorical significance of a conversion symptom was crucial in establishing and maintaining its resolution.

S.L. was 28 years old and a married mother of two who was referred for consultation by a surgeon who had seen her for a spastic inversion of her left foot. This spastic condition had developed gradually over the preceding 3 months. One year previously, she had had a similar spasm of the right foot that was operated on successfully, but the surgeon hesitated to undertake a second operation because the organic findings that had been present in the right leg were not found.

Her profile was an intact 2–3, and a two-pronged approach was taken. She was instructed to develop tremors in

her left leg, which led to a gradual but consistent increase in flexibility of her muscles. Within 2 weeks, she was able to straighten out her foot and walk. The second aspect of the treatment involved an exploration of her family situation. She was engaged in a struggle with her husband, a temperamental and authoritarian man whom she felt had usurped her authority in running the home. She had learned when her right foot was disabled that such a condition precluded sexual involvement with her husband. The paralysis of the left became an unconscious means of witholding sexual intimacy and indirectly fighting him. She was encouraged to recognize her anger and be more direct in insisting on her prerogatives in the marriage. Her husband accepted and accommodated to her new assertiveness, and much of the resentment was resolved. She was seen for a total of 10 sessions over a 2-week period. Follow-up during the next 10 years revealed her to be exuberant about the new direction she was taking in her marriage. She had occasional periods of rigidity in her foot but quickly mastered them using the self-hypnotic exercises.

A randomized clinical trial of a complex rehabilitation program for 139 patients with conversion and somatization disorders (Moene et al. 2002) showed that the overall treatment program was effective but that hypnosis did not add to its effectiveness, nor was hypnotizability on the Stanford Hypnotic Clinical Scale predictive of outcome. Two types of hypnotic intervention were used, one involving direct suggestion of alleviation of symptoms, such as muscle relaxation or movements. The other involved an insight-oriented approach involving expression of "pent-up or dissociated emotions" (p. 69) and discussing them in therapy. The complexity of the intervention and number of hypnotic interventions may have improved outcome but made it difficult to detect the effect of components of the treatment.

Non-Epileptic Seizures (Pseudoseizures)

There is growing evidence that hypnotizability is a vehicle for the expression of stress and distress using often dramatic somatic metaphors, not unlike Breuer and Freud's (1893–1895) formulation that hypnoid states underlay many conversion symptoms. Recently, it has been shown that the hypnotizability of individuals with conversion disorder is significantly higher than that of a matched sample of patients with mood disorders (Roelofs et al. 2002a) and furthermore that another contributing factor to conversion disorder is a history of childhood abuse (Roelofs et al. 2002b). Given that the antecedents of hypnotizability include not just positive features, such as a history of imaginative involvements and identification with the opposite sex parent, but also a history of punishment (Hilgard 1970), it makes sense that hypnotic responsiveness may be preserved in some traumatized individuals through development as a defense against past and ongoing trauma (Butler et al. 1996).

Indeed. there is evidence that a history of abuse or posttraumatic stress disorder is associated with greater likelihood of pseudoseizures (Barry and Sanborn 2001). This suggests that the disorder may represent an unresolved psychosomatic response to the somatopsychic stress of sexual and physical abuse. The assessment of hypnotizability has been found to be a useful diagnostic probe in the evaluation of epileptic versus non-epileptic seizures. Barry et al. (2000) found that scores on the HIP were significantly higher among those patients with pseudoseizures and that hypnotic seizure induction further clarified differential diagnosis. Indeed, the ability to induce a seizure with suggestion alone has been found to be a useful tool in differential diagnosis (McGonigal et al. 2002), which is not surprising given the ease with which highly hypnotizable individuals can spontaneously enter into hypnotic-like states. Barry et al. (2000) found that the sensitivity of seizure induction in the diagnosis of non-epileptic events was 77%, with a specificity of 95%. Goldstein et al. (2000) found patients with pseudoseizures to have higher scores in the Dissociative Experiences Scale and the Perceptual Alteration Scale, two measures of dissociation, but not on the Creative Imagination Scale, a measure of hypnotizability that subjects in the study found "difficult to concentrate on, and in one case, upsetting" (p. 320). The authors note that the HIP "may assess hypnotizability more explicitly" (p. 320).

The following two cases involve highly hypnotizable individuals who were initially diagnosed as having serious neurological disorders. Their cases are presented to emphasize the chameleon-like quality of highly hypnotizable persons and their extreme capacity to use and become trapped by somatic metaphors. As previous cases have illustrated, less-hypnotizable individuals are also vulnerable to

conversion, but in a probabilistic sense, conversion symptoms are much more prominent among those who are highly hypnotizable.

Case Example 1

T.J. was a 45-year-old married housewife with two adolescent children. She developed severe convulsive seizures occurring 8-12 times a day, sometimes during sleep, over a 2-year period. The seizures themselves lasted 15-20 minutes. She was never incontinent, never hurt herself or bit her tongue, and exhibited extension rather than contraction of her anti-gravity muscles during the seizures. All of her extensive laboratory and EEG studies proved to be negative. Despite all evidence to the contrary, she was diagnosed as epileptic and placed on anticonvulsive medications, without effect. During this period, she was seen by seven different doctors, and all concurred with the diagnosis. The seventh doctor implied that her case was hopeless and referred her to a "hospital for the incurable." This frightened her and her husband into seeking further help, which led to a psychiatric consultation.

The author (H.S.) examined her with her husband present. She scored a 4-5 on the HIP, with a cluster score revealing Dionysian traits. Eight years previously, at the age of 37, she had had a hysterectomy. A note in the hospital chart indicated that she had had seizure movements postoperatively, but it was attributed to the anesthesia. One year later, she had a brief attack of an inability to open her eyes. During the first interview, she was instructed to re-enter the trance state and let a seizure happen. The seizure that followed was so intense that she slipped out of the chair and onto the floor. When she was brought out of the trance, the therapist said, "Good, I have something to show you that will help you." This was the first time in her entire experience with doctors that she had not received a message of despair or fear but rather one of hope and approbation at the production of the symptom. In the presence of her husband, she was instructed to re-enter the trance state and start another seizure, which she did. After a while, she was told, "Since you started it, now you can learn to stop it." She was given instructions to make a fist, and then by

opening the fist to terminate the seizure and leave the trance state. She was advised to practice entering the trance five times a day, bringing on a small seizure and then stopping it. In the event that a seizure occurred spontaneously, she could then invoke her new skill to stop it. The exercise had a double effect; it reduced the probability of a spontaneous attack, and if one did occur she had a method for controlling it.

In five sessions over a 2-month period, she succeeded in reducing the seizures to the point that they became occasional minor episodes lasting a few seconds. The family rejoiced at her newly found control. They had been so concerned that her husband and children had actually signed up for shifts to watch her during the previous 2 years so that she would not have a seizure alone. Because this restructuring approach using self-hypnosis became a learning and discovery experience, she was not humiliated by overcoming the symptom; rather, it emerged as a victory for the whole family. Her husband's loving concern and support was especially helpful in avoiding any recriminations or setbacks. There was no discernible secondary gain.

This case differs from several presented previously in that no clear message emerged from the symptom. Although T.J. had received additional attention and concern from her family, there were no obvious family problems. From a dynamic point of view, much could be made of the importance of her hysterectomy as an unconscious factor, but typical of Dionysians, the patient evidenced no curiosity at all about the causes of the disorder. At 12-year follow-up, she and her family were doing well, and there had been no recurrence of the symptom.

Case Example 2

M. W. was a 53-year-old married woman in a feuding, wealthy family. She had experienced non-epileptic seizures for 5 years and had been unsuccessfully treated with a variety of antiepileptic medications, despite the absence of evidence of EEG abnormality. Her seizures occurred several times a day but never resulted in serious injury or incontinence. However, they resulted in her inability to care for her beloved grandchildren or even be left alone with them, which caused increasing frustration for her. On evaluation, it was clear that she was the buffer between different branches of her feuding family. They had fought one another in court over control of the family business. She was the one who would try to get them together at holidays and usually took abuse from both sides. In particular, her father was a dominant patriarch who would berate her about her brothers during her daily phone calls. She simply "took" this abuse.

She was highly hypnotizable, scoring a 4 intact with an induction score of 10. After the HIP, I (D.S.) had her relive her last seizure, and she had one in the office. I taught her how to bring on mild seizures by entering a state of selfhypnosis and had her practice this in the office, as well as on her own when she was in a safe setting. I also worked with her on extracting herself from the damaging role she played in her family. I pointed out that if she hung up when her father was rude to her and then did not call for several days, he would begin to understand that she would no longer be the primary outlet for his anger at her brothers. I advised her to let others try to pull the family together. She took more vacations and found to her surprise that the family was becoming more respectful to her. Her spontaneous seizures declined and then stopped, and she discontinued the anti-epileptic medication. The pseudoseizures were her way of expressing her distress and were no longer necessary when she reduced the source of her stress, while she also learned to directly control the seizure-like activity with selfhypnosis.

Such approaches as illustrated in the preceding two examples provide reasonable hope that pseudoseizure symptoms can be ameliorated or eliminated. It is best to emphasize a multimodal approach, using self-hypnosis to demonstrate and enhance control over the occurrence and severity of the pseudoseizures while working through with patients their means of coping with past and ongoing stressors in their lives. In addition, appropriate psychopharmacology for concurrent depressive and anxiety disorders may be helpful as well. Estimates are that one-third to one-half of such patients can expect to become symptom free (Barry and Sanborn 2001).

Other Pseudoneurological Conversion Disorders

Often, dramatic symptoms mimicking peripheral as well as central nervous system dysfunction are amenable to treatment using hypnosis as well. Indeed, it is worth remembering that many "conversion" symptoms are actually a combination of true somatic symptoms with a psychological overlay. It is not uncommon for patients with conversion seizures to have a true seizure disorder as well that becomes the symptomatic basis for pseudoseizure elaboration, as in the following example.

K.N. was a 24-year-old New York–born woman who was diagnosed as having multiple sclerosis 2.5 years before coming to the therapist's attention.* Her initial symptoms included weakness, pain, and tingling in her left leg. Over the next several months, she complained of blurred vision, diplopia, urinary frequency, increasing weakness in her lower extremities, ataxia, slurred speech, and other transitory symptoms.

K.N. was first seen in Madrid, where she lived. Later, she traveled to New York for further neurological testing. The objective findings were slight ataxia in the lower extremity, slight hyperreflexia of the left biceps and left patella, and questionable minimal temporal pallor of the left optic disc. After the New York workup, she went to a southern medical center for further treatment. She had skull X rays, EEGs, a brain scan, echoencephalogram, and cerebrospinal fluid studies, all of which were within normal limits. She also had a myelogram with foramen magnum studies that were normal, but she developed a pulmonary embolus postmyelogram.

K.N. received Coumadin (warfarin), intrathecal steroids, intravenous adrenocorticotropic hormone, and a course of immunosuppressive drugs (Imuran [azathioprine]). While on Imuran, she became pregnant and obtained a therapeutic abortion because of the medication. Approximately 1 year after the onset of the illness, she was again admitted to a New York hospital and received another course of intrathecal

^{*}Barbara DeBetz, M.D., provided this case report.

steroids, with a resulting chemical meningitis. She also developed an allergy to adrenocorticotropic hormone. She got progressively worse and was finally confined to a wheelchair.

K.N.'s past medical history was essentially negative, except for seven episodes of thrombophlebitis when in nursing school. She was a middle child in a family with seven siblings. One brother had an episode of blindness at the age of 18 that had lasted for 1 month. Although he was diagnosed as having multiple sclerosis, he had since been well for more than 10 years. One first-degree female cousin had a diagnosis of multiple sclerosis and was nursed by the patient for a while. The patient's father had chronic disc disease and had multiple operations for it. Her mother had had several episodes of thrombophlebitis.

K.N. came from a middle-class family and described her childhood as relatively happy and uneventful. At the age of 8, a few days after her mother returned from the hospital with a new baby, she developed "brain fever" and was hospitalized. She remembered thinking at that time how nice it would be to receive attention while being in the hospital. During high school, she had dysmenorrhea, which was conveniently used to avoid taking tests. She had frequent colds and episodes of thrombophlebitis while going to nursing school. After graduation, her phlebitic episodes stopped completely. She worked as a psychiatric nurse, felt very competent, and had no physical complaints.

As a nurse, she met her husband, a Spanish lawyer obtaining graduate training in the States. After he finished his training, they were married and moved to Madrid. K.N. was faced with adjusting to a rather different way of living. His family did not readily accept an American as their son's wife; also, they constantly criticized her for not having a maid, for being too independent, and for not becoming pregnant right away. Her husband started his law practice and had less and less time for her. At about that time, her first symptom appeared. Two and a half years later, she returned to New York for further hospitalization. One of the neurologists started to have doubts about the diagnosis because of the lack of objective findings throughout the illness. Psychiatric consultation was performed, and the patient was found to be a grade 5 on the HIP. Psychological testing showed no organicity but did show evidence of the dynamics of a conversion disorder with depressive features. She was discharged from the hospital and referred to the therapist for appropriate psychotherapy.

K.N. was seen for a total of 11 therapy sessions over a period of 2 months. The treatment strategy consisted of the following steps. First, several basic questions had to be clarified, such as: Why is she in the situation of using a conversion mechanism to express her conflict? What cues did she obtain from her environment to act in this specific way? Why did she use somatic metaphors as a means of communication? What was the secondary gain element?

In summary, the clarification of these questions follows: K.N. had married into a family that did not really want her, with a different language, culture, and value system. When in New York, she was in charge and on top of the situation; in Spain, her husband was. His family put pressure on her to be something she could not be—a "Spanish wife." Initially, she rebelled against them, but the pressure increased, and the message she received was, "You'd better be a helpless, submissive, dependent woman, if you want to make it with us." She received the message and became progressively more debilitated, needed a maid, could not ride her bicycle anymore, and needed an escort even to leave the house. Now she was helpless and dependent. She had fulfilled and caricatured their expectations.

The patient used a body metaphor because it had worked for her before (i.e., when she was 8 years old and had that strange "brain fever" to obtain more attention than the newly arrived baby). In high school, dysmenorrhea had been convenient and in nursing school, thrombophlebitis had been useful. Her family had always responded to illness. The secondary gain factor was that when she was totally disabled, her husband and his entire family became very involved with her. After all, who would be rejecting toward someone who has such a tragic disease as multiple sclerosis? She received attention not only at home but also as a patient. In any hospital, she rapidly became the favorite patient, the most interesting and most presented patient. One of the many doctors throughout her illness was so fascinated by her as a patient that he quite inappropriately wanted her to leave her husband and stay with him.

After these issues were clarified with her, therapy consisted of a restructuring of her metaphors. She progressed rapidly
and learned to recognize her vulnerabilities and how to master them. She learned that she had alternatives and a right to use them. Therapy did not include gaining analytic insight in a longitudinal way but was rather present- and future-oriented. The transference between patient and therapist was left completely untouched. Over the following 2.5 years, the patient was symptom-free, delivered her first child, and maintained a full schedule of physical and intellectual activities.

Although we have focused attention on the use of the HIP in identifying individuals with high scores who are prone to the use of a somatic metaphor, it can be equally useful in contributing to the diagnosis of organic disease that masquerades as a functional disturbance, as in the following case example. There are case reports indicating that hypnotic suggestions of direct symptom improvement can be helpful with symptoms of true neurological illness, such as multiple sclerosis (Sutcher 1997).

F.J. was a 41-year-old teacher who noticed a gradual onset of difficulty in breathing while talking to his class. He then began emitting noises that made him sound as though he were about to cry, which he attempted to stifle. At unexpected moments, his voice would begin to quiver, and he would feel on the verge of tears. He progressed to the point that he made excuses to avoid lecturing. He had concluded an apparently successful analysis some 10 years before, and he returned to his analyst in an effort to understand the emotional meaning of this embarrassing new symptom. After 2 months, with no insight about the problem, which had not abated, he was referred for treatment with hypnosis.

His HIP profile was a 2 soft, and his cluster questionnaire responses were on the Apollonian side. This configuration was inconsistent with the assumption that the symptom was a conversion disorder. A high-intact profile would have been consistent with a tendency to use somatic metaphor in this manner. Because a neurological deficit might account for the soft pattern on the profile, he was referred to a neurologist, who diagnosed the symptom as an unusual variant of Giles de la Tourette syndrome. He was prescribed haloperidol, which contained the symptom, and at 4-year follow-up, he was still in good control.

latrogenic Anxiety

In dealing with a highly hypnotizable patient, there exists a fine line between an inquiry about a symptom and an instruction to have it. Some patients are capable of listening to a doctor's doubts and concerns and keeping them in proper perspective as speculation. Other patients, often those who are highly hypnotizable, are more inclined to lose this perspective and pick up on the doctor's affect of anxiety rather than the content of his or her concern, as illustrated in the following example.

A psychiatrist, Dr. A., was the informal consultant for a large family circle through a patient he had known for a number of vears. He had even done a hypnosis profile on her, knowing her to be a grade 4-5 with most of the typical Dionysian features. She had recently begun complaining of chest pain and had consulted an internist about this problem. He gave her a thorough workup, including a stress test and an electrocardiogram. Although there were no positive findings, he reported to the patient that she might have some heart trouble and that he wanted her to return in 6 months for another examination. This was hardly reassuring to the patient, who immediately impressed on her family the message that there was something drastically wrong with her heart. Dr. A. was called in as a result of the ensuing family turmoil. The patient's husband was especially upset, confused, and asking for guidance.

In that setting, the psychiatrist then telephoned the internist for clarification. The internist was shocked when the psychiatrist told him that "someone scared the daylights out of her." The internist stated that he found some nonspecific changes but no evidence of coronary artery disease. He then went on to say, "Her symptoms sound so real." She had convinced him to ignore his own findings. The psychiatrist informed the internist that the patient had a long history of dramatically exaggerating minor somatic complaints. She had interpreted the internist's minor concerns and methodical approach as indicating a probability of heart disease, rather than a rather remote possibility. The psychiatrist prevailed on the internist to give the patient a clear message that

she was in good physical health. The patient was given this message by the internist, and her anxiety and that of the family diminished markedly. At a 2-year follow-up, the patient still had no signs of coronary disease.

An Apollonian patient might have accepted and understood the meticulous concern of this internist much better. The careful plan for retesting would have reduced such a patient's anxiety, rather than increasing it. In this case, the patient was so sensitive to emotional cues that she more or less ignored the context of the communication. Taking this into account, the psychiatrist was of help in clarifying the basic communication between the internist and the patient, with the resulting decrease in everyone's anxiety.

It is hoped that the considerations outlined in the previous case example can help to refine a time-honored but often forgotten clinical maxim: What is said is not necessarily what is heard. Patients with different personality styles and problems listen selectively, and a clinician can be far more effective if he or she takes into account enough of the patient's personality style that his or her communication will convey what is intended rather than what the patient fears or expects. Information about a patient's hypnotizability, even if only probable such as the eye-roll, may alert the clinician to possibilities of misunderstanding and to a preferred mode of communication.

Conclusion

The case examples in this chapter demonstrate that hypnosis can be an effective tool in evaluating and treating a variety of psychosomatic and conversion disorders. Whether the primary etiology is organic or functional, significant symptom mastery can be obtained with this psychological intervention. Intact hypnotizability, whether low or high, is all that is necessary to signal the clinician that hypnosis may be helpful. Treatment of low-hypnotizable patients usually requires a synthesis of self-hypnosis exercises, with interpretation of the meaning of the somatic metaphor, if one can be discerned. More highly hypnotizable patients often obtain dramatic symptom mastery with a relative disinterest in insight or explanation, which is consistent with their Dionysian personality characteristics.

The importance of the assessment of hypnotizability as a diagnostic probe deserves emphasis. The difficulties of differential diagnosis of functional versus organic disease can be mitigated somewhat by a disciplined measure of the propensity and style of the patient's use of somatic metaphors. We have found the HIP to be a useful clinical instrument for evaluating the significance of the reactive component in a somatic complaint. Formally measured high hypnotizability is an indicator of a patient's imaginative capacity to amplify a symptom, as well as of potential to control it. In this sense, the assessment of hypnotizability can help the clinician distinguish between the dramatic subjective reportage of the Dionysian and the stoicism of the Apollonian. Just as we are inclined to think metaphorically when we hear a somatic complaint from a Dionysian, we are inclined to think organically when we hear a similar complaint from an Apollonian. Likewise, the same statement from a concerned physician may be heard entirely differently by patients with contrasting personality styles.

The key issues in treating conversion disorder and the conversion components of somatic disorders are the following:

- 1. Clarify the differential diagnosis carefully.
- 2. Avoid an either/or stance. Telling a patient that his or her problem is all in his or her head is a sure way of guaranteeing treatment failure, because it puts the patient in a position of being humiliated if he or she gets better.
- 3. Focus on rehabilitation, using self-hypnosis exercises as one component of a program that reinforces the patient's motivation and ability to recover.
- 4. Take a mind and body approach, using hypnosis, psychotherapy, and appropriate medication to
 - a. Control the symptom itself
 - b. Better manage the stressors that exacerbate the symptom or the messages communicated by it
 - c. Consolidate gains and provide positive reinforcement to the patient for them

Hypnosis is at the cutting edge of an individual's ability to control somatic function. For this reason, it may become the vehicle for the expression of conflict, but it may also be the means for pointing the patient in the direction of control over such symptoms. This page intentionally left blank

CHAPTER 17

Miscellaneous Behavior Disorders

Hair Pulling (Trichotillomania)

Trichotillomania is a relatively uncommon but troubling problem that involves habitual hair pulling, which often leads to bald spots. Hair pulling is an interesting problem because of the complex interaction between the underlying dynamics and the secondary gain and loss factors that rapidly intervene. Many patients who habitually pull out their hair become quite embarrassed about the symptom and go to great lengths to hide their "secret," including the wearing of wigs, the use of artificial eyebrows and eyelashes, and social withdrawal. Nonetheless, the problem can often be dealt with successfully. A study of treatment acceptability indicated that students (not patients) rated hypnosis and habit reversal (a behavioral technique) preferable to medication or punishment for the treatment of trichotillomania (Elliott and Fuqua 2002). Reasons given for the preference included anticipation of efficacy and lack of side effects. Thus, hypnosis is likely to be an acceptable approach to this problem for many patients.

After the appropriate medical and psychiatric history is taken, the Hypnotic Induction Profile (HIP) is administered. Presuming that the patient has some trance capacity—that is, that the patient is within the intact range on the HIP—the following instructions are given to the patient:

Let your body float. Concentrate on this imaginary floating and at the same time permit one hand or the other to feel like a buoyant balloon and let it float upward. As it does, your elbow bends and your forearm floats into an upright position just like a balloon. This is the beginning of the treatment for hair pulling. Now when your hand reaches this upright position, it is your signal to enter a state of meditation in which you concentrate on this imaginary

floating and at the same time concentrate on these three critical points.

- 1. For your body, hair pulling is an insult. You are composed of a number of components, the most important of which is your body. Hair pulling is not so much an insult to you as it is to your body specifically.
- 2. You cannot live without your body; your body is a precious physical plant through which you experience life.
- 3. To the extent that you want to live your life to its fullest, you owe your body this commitment to respect it and protect it. This includes protecting it from the insult of pulling out its natural adornment.

Experience this physically by transforming your desire to harm your body by pulling out hair into a positive respectful action stroke your hair instead of pulling at it. Go ahead, try that now.

Now I propose that you do this exercise every 1 or 2 hours. Each time, it takes about 20 seconds. During this 20-second period, you repeat these three points. Later, I will show you a camouflaged way of doing it if you don't have privacy. Each time you do the exercise you bring yourself out of the state of concentration this way. On three, get ready; two, with your eyes closed, roll up your eyes, do it now; and one, let your eyes open slowly. When your eyes are in focus, slowly make a fist with the hand that is up. Open your fist slowly and let it float down. That is the end of the exercise.

Allow a few moments for the patient to react to the impact of the message and then discuss it with him or her. By way of review, let the patient watch you go through the entire exercise and repeat the three points aloud. The patient is taught a camouflaged way of performing this exercise so that it can be done in the presence of others. The patient is also taught a reinforcement sign, usually letting the hand float up to stroke the eyebrow, as a somatic way of reinforcing the concept of respecting and protecting the body. The somatic signal is particularly appropriate because the patient is taught to stroke rather than destroy the same part of his or her body. The discussion with the patient is tailored to his or her personality style. The major themes involve avoiding negative injunctions to the patient and emphasizing the patient's respect for his or her body. The following examples indicate the response of two patients with opposite personality styles and HIP scores. The first patient was a young woman who used a phenothiazine during her treatment and thought that the combination of self-hypnosis and medication was useful.

Case Example 1: An Apollonian

M.T., 23 years old and separated from her husband, was referred for treatment by her group therapist. She had begun pulling out her hair approximately 3 years previously. When asked why she began pulling her hair, she replied, "I had to prove an easy math theorem. I got mad at my brain. It was a way of getting at my knotty nerves." She talked about feeling lonely and depressed in the face of a bad marriage and of considerable loneliness while studying far away from home. M.T. had bought a wig in an effort to stop the hair pulling. She hoped that the wig would keep her from touching her hair, but it had the opposite effect. After she began wearing the wig, she found herself missing "50%" of her hair. She described herself as "doing it every day-all the time." She said that she felt desperate and at times suicidal and had become convinced "that there is no such thing as free will."

She had been in group therapy for approximately 1 year. She had reduced the hair pulling by taking trifluoperazine HCl 15 mg/day, but she did not like using medication; after several months she stopped taking it and resumed pulling out her hair. Her therapist viewed her as a depressed and obsessional but nonpsychotic and nonsuicidal young woman. He said she had been working in the group on her relationships with people but that she was particularly interested in stopping the hair pulling now because she was planning a trip home in 3 months, and her parents did not know of her selfdestructive habit.

M.T. was extremely talkative during all three of her visits. Initially, she was argumentative, stating that one could really make no choices. She was quite skeptical about hypnosis. She assented to cooperating with the HIP on the first visit and was graded as special zero (induction score, 6.5) with a 0 eye-roll and 1 levitation. During the second session, M.T. apologized for the first: "I became sad at the idea that I hurt people—for example, you—by laughing and calling your technique simple-mind-

ed." She then stated that she thought I had constructed the induction procedure especially for her to prove that she was in control and to "prove something about choice." As she said this, she smiled her unchanging sad smile. Nonetheless, she responded to a suggestion that we set aside the debate and get on with the treatment. She was taught an exercise in self-hypnosis in which she was to repeat the following three points to herself:

- 1. For my body, hair pulling is an insult.
- 2. I need my body to live.
- 3. To the extent that I want to live and do productive work to help others, I owe my body this commitment to respect it.

It was further proposed that if she felt an impulse to pull her hair, her hand would float up and stroke it instead, as if caressing it.

She returned approximately 2 weeks later, equipped with graphs documenting her improvement. She estimated an overall "60%" improvement, meaning that she was pulling out her hair only 60% as much as she had before treatment. She added that she pulled her hair "when I think it isn't worth it—that nothing is. I have a feeling I have to have the courage to follow a thought through to its conclusion." The graph documented a cycle of ups and downs in her hair pulling. On some days, she pulled virtually none at all, and on others she pulled out the same amount (or, in one instance more) of her hair than before treatment.

A follow-up by telephone 3 months later produced the information that M.T. had effected a "90% reduction": "I tried the hypnosis again, but with a different emphasis—it was best to concentrate on relaxing and that is very effective." She mentioned that she had resumed taking trifluoperazine HCl, this time 5 mg/day, and she said that the combination was useful: "I am surprised that the effects are so good." She said that she would be returning home shortly and might have to tell her parents about her hair pulling but thought that soon she would no longer need to wear a wig.

In M.T.'s case, the restructuring technique seemed moderately useful, although she preferred using the trance state primarily for the relaxation it gave her. She initially presented for therapy prepared to argue, and the issue of control seemed primary. She was both afraid that she would hurt the therapist's feelings by failing and prepared to prove that hypnosis was laughable. With the help of her work in group therapy, it was largely possible to bypass this competitive and angry side of her and focus her attention on hair pulling as the issue rather than the effectiveness of the therapist and hypnosis. Characteristic of people who are low on the hypnotizability spectrum and who are primarily obsessional, she placed great emphasis on talking out the strategy, examining it on her own terms, and using only the parts of it that she decided were useful to her. For M.T. to change her behavior took a great deal of effort. She had to examine it cognitively and test out how much her change would involve some kind of compliance or submission to the therapist's will. Only when she satisfied herself that she could accept and reject parts or the whole did she finally, cautiously, and in graded steps use the technique along with medication to reduce her symptom.

The following case of J.R. provides a marked contrast to that of M.T. Both young women presented the same chief complaint: They were habitually pulling out their hair. Yet their trance capacities, personality structures, and manners of response to treatment were quite different.

Case Example 2: A Dionysian

J.R., a single woman in her late 20s, was brought to the therapist by her boyfriend because of her hair pulling. She had been pulling out strands of hair on a daily basis for about a year, and had several bald spots on the back and sides of her head as a result. She had taken to wearing a wig constantly in public, and her boyfriend was the only person who knew about the problem. J.R. was at first quite shy and embarrassed about the problem and came for help only at the insistence of her boyfriend. The HIP was performed: J.R. scored high, with an induction score of 9. She was taught self-hypnosis and an exercise similar to the one given M.T.

She performed the exercise regularly and within several weeks had completely stopped pulling out her hair. She also requested continued psychotherapy to help her assess various aspects of her life, including her relationship with her boyfriend, her job, and her view of herself. For her, the initial

problem was one of being "acceptable" to the therapist so he would continue treatment. She made the problem into one of being good enough that he would be interested in treating her. It took several sessions before she would allow the therapist to examine the part of her head where she had pulled out hair and then she agreed only with blushing and the expectation of ridicule. She made numerous changes in her life during the 18 months of treatment. During the period of her most intense positive transference, she began the break-up of her 7-year relationship with her boyfriend. He was a bright but quite disturbed young man who had attacked her with a knife during a psychotic episode several years previously. After this change, the transference changed also, from hopeful longing to angry disappointment that the therapist would not take the boyfriend's place in her life. She always put the problem in terms of what was wrong with her-was she not attractive or bright enough? J.R. felt herself to be in competition with the therapist's real or imagined woman, and she also sought to control him by forcing him to change roles in her life-from therapist to boyfriend. (In the case of M.T., anger and confrontation had been overt, with the hostile attack perhaps serving to provoke an intense involvement and to deny positive feelings.) In I.R.'s case, sexualized advances were the overt method of relating to the therapist, with competitive anger beneath them.

The other side of the hysterical coin, the desexualization of the sexual, was revealed in discussions of the significance of hair pulling with J.R. During the discussions, which occurred several months after the symptom abated, J.R. began talking about a local hairdresser she had frequented before she began pulling out her hair. He was a handsome married man in his 30s who had commented repeatedly on how beautiful her hair was. He had often done her hair for no fee and in exchange she allowed him to use pictures of her hair as advertisements of his work. She smiled as she confessed how much she had enjoyed his loving care of her hair, and she related that she had resisted his attempts to seduce her. She recognized that her destruction of her hair was in some way a retreat from her strong sexual response to him.

J.R. made numerous changes in her life during therapy, including achieving orgasm with a man, although she had not specifically dealt with this problem in therapy. She was also promoted at work and took the opportunity to reassess her career choices. These changes provide an illustration of the ripple effect (see Chapter 10, Restructuring): She ended a difficult and in many ways unsatisfactory relationship with a man, improved her sexual satisfaction, and performed better in her job. She also began rethinking her relationship with her family. The only sign of anything like symptom substitution was a brief period of bruxism (teeth grinding), which she mastered in a week with a similar self-hypnotic exercise. Toward the end of therapy, she briefly resumed pulling her hair in an almost symbolic recapitulation of the presenting situation but again quickly mastered it.

It should also be noted that resolution of the problem did not prevent the patient from exploring aspects of its meaning. In fact, she seemed far less resistant to such exploration because she could examine the behavior as part of her past and not as something that still dominated her.

There is evidence that hypnosis can be quite helpful for bruxism (Clarke and Reynolds 1991; Somer 1991). Useful suggestions include instructions for reducing mouth muscle tension, such as "lips together, teeth apart" (Clarke and Reynolds 1991), increased awareness of excess muscle tension, and imagery that conveys reduced mouth muscle tension even while asleep.

Comparing the Two Cases

It may be useful to review ways in which a Dionysian's (J.R.'s) responses contrast with those of M.T., an Apollonian. J.R. responded quickly and dramatically to therapy, stopping her hair pulling completely. She felt that the help of the therapist was indispensable and made it her project to convince the therapist that she needed more treatment with him. In contrast, M.T. reduced her hair pulling quite gradually and did not stop completely. Although she was in group therapy, she showed no particular interest in pursuing treatment with the therapist who taught her to use hypnosis. She insisted on making corrections and modifying the treatment that she was taught. She felt that she had thoroughly ridiculed the therapist in her first session, whereas J.R. felt she had displeased him. J.R. showed the characteris-

tic core of self-doubt seen in people who are quite hypnotizable. The problem for such people becomes that of complying so that others will overlook their "obvious" shortcomings.

Furthermore, J.R. immersed herself in the "here and now" of the treatment, quickly adopting it as an important part of her life. M.T. was skeptical from the outset, cautiously comparing the treatment approach with her own set of philosophical beliefs. She evaluated the results as a percentage of her past tendencies. She presented for help not out of current distress, because she felt she had mastered a way of living with the problem, but in anticipation of a future problem when she returned home several months later. Thus, her time perspective was not present oriented but past and future oriented. Furthermore, her approach was rational and critical, as compared with the affective immersion of J.R.'s relationship with the therapist: M.T. assimilated the new experience by complying with only parts of the exercise, graphing her response on paper, and evaluating the philosophical background. J.R. affiliated with the approach, emphasizing compliance as opposed to rational review. For M.T., hostility covered sexuality; for J.R., sexuality covered hostility. M.T. thought before feeling; J.R. felt before thinking. Intensive therapy for J.R. involved having her step back and take a critical look at an intense personal involvement in which she had gotten little in return for much support of her partner. Group work for M.T. was focused on having her loosen up and relate more emotionally to people.

Thus, in many ways these two women were transformations of each other. They presented the same initial problem: self-mutilation by hair pulling. They both lacked self-esteem and could not easily express hostility other than by hurting their bodies. And yet their styles of living and of responding to the therapy were quite different. Where one (M.T.) emphasized thought, the other gave preference to affect. Where one criticized, the other (J.R.) accepted. What is interesting is that both were given a basically similar restructuring approach using self-hypnosis, and each gained quite different things from it. M.T. picked certain aspects, modified them, and even then complied only partially with them. J.R. uncritically complied and made her problem the response of the therapist to her.

The contrast between these two patients suggests that the restructuring technique is broad enough to offer something to people with personality styles that differ considerably. People listen in their personal language and take what they understand. Subsequent psychotherapy aimed at centering (see Chapter 18, Spectrum of Therapies) may involve an attempt to broaden the language and increase the realm of conscious choice about such issues as uncritical compliance or hypercritical withdrawal. However, the initial symptom approach seems useful to people of both high and low hypnotizability. There is evidence that emphasizing the patient's role in protecting his or her body is a particularly effective technique for treating hair pulling (Zalsman et al. 2001). The manner of response to such an approach is both diagnostically revealing and useful in itself if further exploratory treatment is planned.

Stuttering

There are many kinds of stuttering, but the common denominator in the problem seems to be some defect in sensing or using an internal sense of rhythm when speaking. Although the humiliation of stuttering is often associated with painful pauses in speech, the fact is that many stutterers actually rush into their speech, which alternates between being too rapid and too slow—the natural cadence is missing. Although stutterers focus on their halting speech, the actual problem is an effort to speak too quickly, losing connection to the natural prosody or rhythm that makes speech fluent. This points to the appropriate therapeutic strategy—helping patients to develop a more flowing, rhythmic sense of time while speaking.

Using hypnosis is an adaptation of the speech therapy technique developed by Brady (1971). Using the trance state as a means of eliciting intense concentration, the therapist gives the following instructions to the patient, with a metronome providing cadence for the therapist's speech. The therapist models the verbal exercise of timing speech to the beat throughout the instruction period:

When you imagine yourself floating, keep in mind that the major deficit in stuttering and stammering is the tendency to rush into speech out of synchrony. This can be corrected by talking, thinking, and feeling in terms of the beat, always the beat. It is well known that stutterers rarely stutter when they sing. It is not because of the melody, it is because of the beat, the beat, the beat, always the beat. When most people who speak fluently are speaking, they are unconsciously or consciously in tune with their beat, the beat, the beat, always the beat.

It is useful at the beginning to have a metronome set at the beat of the resting heart, which is around 65 to 70 beats per minute. In this context, it is possible to now reestablish contact with your natural rhythm, your natural beat, the beat, the beat, always the beat. Sometimes, if you wish, you can rest or pause but always in tune with the beat. Sometimes you can bunch up your words and speak quick phrases bunched together, but always in terms of the beat. You can function just like a conductor who controls the rhythm of the orchestra, making some variations from time to time but always in tune with the beat. Sometimes, if you wish, you may syncopate the beat. But always in tune with the beat, the beat, always the beat.

At first, if it is necessary have the metronome around so you hear it day and night. You can have it at your bedside and allow yourself to fall asleep in tune with the beat, the beat, always the beat. Once you make this commitment to speak and think in terms of the beat and even pause in terms of the beat, the correction becomes fixed and you are now able to make up for a deficit; you are now able to speak with the same sense of rhythm that fluent people use. In a way this is very much like approaching the problem of stuttering the way you would the problem of diabetes. The deficit in diabetes is that the body does not produce enough insulin. The correction is to simply provide something that is missing. In the case of diabetes, supply insulin; in the case of stuttering, supply the beat. Reestablish contact with the beat, starting with the beat of your own heart. I propose you do this exercise every 1 to 2 hours. Each time, the exercise takes approximately 20 seconds in which you simply reinforce the concept of floating and at the same time remind vourself to speak, think, talk, and feel in terms of the beat, the beat, the beat, always the beat. When you come out of this self-induced exercise, give yourself the posthypnotic signal that you will continue to think and talk in terms of the beat, the beat, the beat, always the beat.

If you do not find this helpful enough, you can resort to a more extreme correction by buying a metronome that is battery powered and looks like a hearing device. You can insert it behind your ear and hear the beat while nobody else does. Until you find yourself able to correct the problem on your own, this device may be of use.

The following case example illustrates the use of the preceding technique to treat stuttering:

R.E. was a 20-year-old single college student seen by the author (H.S.) for stuttering and a "speech block" that was prominent when the patient had to speak on the phone. This problem had begun at age 3 and did not respond to speech therapy. He had had encephalitis at age 10 and developed possibly unrelated migraines at age 12. In spite of these problems, he was an excellent student.

He was taught the exercise described above after being profiled at the intact 2 level. Follow-up 6 years later revealed that his speech was almost always in control, and he was now an active and successful lawyer.

The case of R.E. underscores the fact that hypnosis is not treatment. The approach developed by Brady for the specific problem of speech pathology is the treatment strategy; hypnosis is the facilitator. This page intentionally left blank

CHAPTER 18 Spectrum of Therapies

The earlier chapters review a series of short-term treatment strategies designed to help the patient restructure his or her approach to a problem using self-hypnosis in one treatment session. We prefer to abide by the principle of parsimony: Use short-term treatment wherever possible, assess the results, and hope that a ripple effect may occur in which the initial mastery of a symptom leads to mastery of other problem areas. Thus, even a small intervention can have a sizable impact on a patient's life, at times comparable to the effect of more intensive psychotherapy. In an era when expenditures for psychotherapy are being ratcheted down and cost consciousness supersedes clinical evaluation, it has become ever more important that we first attempt the most efficient use of psychotherapeutic time and effort. Many times, brief treatment can be highly effective. An example is the patient who found, after overcoming her dog phobia in two sessions, that she was able to make major changes in her life, including ending a failing marriage, going back to school and fulfilling educational aspirations that she had had for most of her life, losing weight, and in general feeling much happier about herself and her new social life (see Chapter 14, Phobias). For many patients like her, brief intervention is enough formal psychotherapy.

When the question is raised by a patient about whether short-term or long-term therapy is necessary, we propose a trial of short-term therapy with a subsequent reevaluation. If the symptom is not quickly resolved, then we reappraise the problem. The initial ineffectiveness of the short-term therapy may indicate that more intensive psychotherapy is necessary. It may involve obtaining additional history and

reformulating the problem. Sometimes the symptom is quickly resolved, and the success of brief intervention stimulates the patient's curiosity about how the problem evolved. Intensive treatment may be undertaken in an effort to prevent the emergence of such problems in the future.

Our approach is in line with a definition of the correct dose of a medication, which was provided by a pharmacology professor of the "old school." His definition was "enough." Although we have emphasized the use of hypnosis in brief psychotherapy, we in no way discount the value of the various long-term psychotherapies.

Determining the Mode of Treatment

Hypnosis is useful for both diagnostic and ancillary treatment purposes in intensive therapy. We first turn our attention to the diagnostic uses of the Hypnotic Induction Profile (HIP) in selecting the appropriate intensive therapy. We have found that the results of the HIP are extremely useful in supplementing the clinical impression, the results of the mental status examination, the clinical interview, and psychodiagnostic testing. In the process of selecting an appropriate intensive therapy, none of these factors alone provides an absolute answer to the question of what the best treatment is. We have found, however, that the profile provides an initial direction as to areas in which we can ask further questions to arrive at a treatment strategy that is relevant and aesthetically appealing to the patient. Although the profile has all of the limitations inherent in any brief clinical instrument, it offers a starting point in assessing a patient's capacity for change.

Therapies for Nonhypnotizable Individuals With Soft and Decrement Profiles

Data cited in Chapter 7, Hypnotizability and Severe Psychopathology, indicate that there is a significant association between relatively severe psychopathology and a decrement or soft pattern on the HIP (Figure 18–1). If a soft or decrement performance cannot be



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accounted for by transient factors such as sedation from medication, then the clinician's index of suspicion should be raised concerning the presence of serious psychopathology. These patterns of performance on the HIP convey a message in probabilistic terms of impaired capacity to respond to a therapy that is self-generating. This association is supported by the follow-up data on single-session treatment using selfhypnosis for flying phobias (see Appendix). The percentage of patients in the intact group responding to the treatment was twice as high as that of patients in the soft and decrement group.

Thus, when a patient has a soft or decrement profile, we are inclined to review the history, mental status examination, and psychodiagnostic testing, if available, for evidence of a thought, character, or affective disorder. Patients who score in the nonintact zone on the HIP often convey a message of a kind of helplessness in regard to their internal ability for disciplined concentration. Because of this internal deficit, treatment intervention for this group is largely external and supportive, such as social or milieu support or medication. As we have discussed previously, included in this group are a large proportion of patients with schizophrenia, depression, sociopathy, and manic-depressive illness (see Chapter 7, Hypnotizability and Severe Psychopathology).

At the least, a soft or decrement profile suggests that self-hypnosis is not likely to be of help in implementing a treatment strategy. Our thinking in terms of treatment then turns in the direction of antipsychotic medication for patients with schizophrenia, antidepressants for patients with serious depression with somatic signs, lithium for those with cyclical affective disorders, and various occupational and rehabilitative programs, including family and social support, for those patients with character disorders and schizophrenia. Some of these patients regain their intact capacity to concentrate when they recover, especially those with depression who respond well to antidepressant medication. In this context, the profile has proved useful as a measuring stick for clinical change, as illustrated in the following case example:

F.D., a 25-year-old married college student, requested help with hypnosis because he had difficulty concentrating on his studies. His profile was a 2–3 soft. Further history elicited the fact that his marriage was going quite badly: His wife, who was of a different nationality and religion than his own, felt very unhappy with his family and with the prospect of their returning to his home country at the end of his studies. He seemed moderately depressed and acknowledged that his marital problems were making him quite unhappy. A month later he returned, stating that he had sorted things out with his wife and that he was feeling much better as a result. His profile then was an intact 2–3. In this case, his clinical improvement was mirrored by the improvement in his trance capacity, most likely in relation to the resolution of his reactive depression. It then became possible to use his recovered trance capacity as an aid in concentration.

Centering

We now introduce the concept of centering. We conceive of an individual's position on the Apollonian-Odyssean-Dionysian personality spectrum to be a kind of biological and psychological anchor point (Figure 18–2) (see Chapter 5, The Person With the Problem: Apollonians, Odysseans, and Dionysians). If an individual decompensates, he or she is likely to do so in certain characteristic directions. Apollonians are likely to develop obsessional features or, given a concurrence of biological, psychological, and social factors, they may decompensate into schizophrenia. On the other extreme, Dionysians are prone to develop dissociative, conversion, or affective disorders.

However, these same individuals also are prone to recompensate in characteristic directions. In the case just cited, F.D. recovered from a reactive depression (he had a 2-3 soft profile at the time) to a milder action-despair syndrome with a 2-3 intact profile. He graduated from clinical depression to brooding about the direction of his career and marriage. This is an example of centering: He recovered his biological and psychological anchor point from a decompensated position. It is hoped that the appropriate psychotherapeutic approach, whether pharmacotherapy, family therapy, vocational rehabilitation, electroconvulsive therapy, or inpatient care, will help the more disturbed patients center on their healthier anchor points. For example, we expect that a patient with schizophrenia in remission would show some Apollonian features, perhaps harboring some obsessional preoccupations bordering on delusions but functioning well. We would not expect the patient to develop the dramatic emotional and interpersonal style of a Dionysian.

Likewise, we anticipate that a patient with bipolar disorder controlled by taking lithium would recompensate to a Dionysian position,



perhaps with some hysterical features. In the case of H.L. reported in Chapter 7, Hypnotizability and Severe Psychopathology, lithium only partially contained her mood swings and, given her 3–4 profile score, self-hypnosis was helpful in further containing them. There were certain dramatic and hysterical features to her instability while taking lithium that were addressed by a restructuring approach using self-hypnosis.

As Figure 18–1 indicates, it is hoped that a certain amount of centering will occur when Apollonians and Dionysians are given psychotherapy. Such patients are unlikely to exchange places on the spectrum, but it is hoped that they will gain perspective about their vulnerabilities and modify them.

Patients With Intact Hypnotizability Profiles

We take the presence of an intact profile as an indicator of a patient's relative mental health and of an intact capacity to concentrate in a disciplined manner. Such a person is in tune with his or her biological capacity to concentrate and, in contrast to patients with soft and decrement profiles, does not show major interference in this ability. In clinical practice, we have used the profile score as a factor in selecting an appropriate intensive psychotherapeutic approach for patients in the intact range who request or have need of such treatment. The intactness of the profile is evidence of a patient's capacity for change. The score itself—high, mid-range, or low—suggests something about personality style and probable type of psychological decompensation, which in turn has implications for the type of psychotherapy that may be appropriate.

We have divided the intensive psychotherapies along a continuum from exploration to persuasion, with three gradations between: confrontation, consolation, and guidance (Figure 18–3). As the diagram indicates, we are inclined to emphasize exploratory psychotherapy for neurotic Apollonian patients who frequently have obsessive-compulsive disorders. On the other extreme, the Dionysians who decompensate, frequently with some form of hysterical reaction, often do best with a more persuasive psychotherapy that helps the patient discover what to do about the behavior rather than exploring the reasons behind it. Odysseans who require psychotherapy frequently have periods of depression and an exaggeration of the action-despair syndrome. We have found that some of the more existential therapies emphasizing confrontation and consolation seem most appropriate in treating



these patients. With this broad overview in mind, let us examine the spectrum of psychotherapies in more detail.

Therapies for Apollonians

Perhaps the archetypal exploratory psychotherapy is the early clientcentered therapy described by Carl Rogers (1951). In his approach, no assumption about the nature of humans is made, and the patient structures the premises with which the treatment unfolds. The therapist's role is a responsive one in which he or she reflects back to the patient the premises and guidelines that the patient has set down. At times and in specific ways, the therapist may confront the patient with contradictions, inconsistencies, or self-defeating operations, but this must be done in a well-prepared way and with a suspension of critical judgment toward the patient, which Rogers terms *unconditional positive regard*.

Another therapy of this general type is classical psychoanalysis and several modern variations on the psychoanalytic method. Of the modern variations, the Sullivanian approach is more similar to Rogers's style than classical analysis because, like Rogers, Sullivan does not make an assumption about the nature of humans. His psychotherapeutic technique, which he called *participant-observation*, was essentially an operational one in which he focused on trying to understand the interpersonal phenomena between patient and doctor (Sullivan 1953, 1954). In the course of understanding this interaction, he hoped to construct a direction that would lead to conflict or anxiety resolution. Together with the patient, the therapist identifies and explores parataxic distortions and their sources, using the therapy relationship as an experiential laboratory for identifying and delineating the sources of interpersonal misunderstanding.

Rogers's and Sullivan's approaches require a patient who is introspective and intellectually curious: one who wants to know why he or she is doing what he or she is doing. They also require a patient who is sufficiently disciplined to persist with what can be a painstaking and difficult process. Sullivan enjoyed working with patients with obsessional behavior and noted with some amusement that it was rare that a hysterical patient survived the first interview to return for a second. This observation is consistent with our general impression that obsessional patients, who are frequently decompensated Apollonians, are the most appropriate candidates for this type of exploratory psychotherapy. They have the requisite intellectual curiosity and are inclined to structure an encounter to such an extent that they almost require a therapist who is relatively passive and nondirective. The therapist becomes more of an advisor or consultant, eliciting information to satisfy the intellectual curiosity of the patient and aiding him or her in delineating the problem area. Once the problem area is identified, there may be some occasion when the therapist may resort to confrontation, but only after careful preparation.

It is our clinical impression that if psychoanalytic therapy is the method of choice for any group, it is for these stressed or decompensated Apollonians; patients with obsessional and other anxiety-based disorders who can affiliate readily with a model of therapy that emphasizes talking and exploration in the service of freeing bound affect. Although many of Freud's early explorations of psychoanalytic technique were performed with hysterical patients rather than obsessional patients (Breuer and Freud 1893–1895), we have observed that the very malleability of patients with hysteria makes them prime candidates for proving the efficacy of almost any psychotherapeutic intervention.

The approach used by psychoanalysts, which is quite rational and cognitive with emphasis on replacing irrational conflict with reason, is very much in tune with the cognitive rational style of an Apollonian. Apollonians tend to genuinely participate in the exploration as an intellectual and view the treatment process as a therapeutic process of untying cognitive knots, unlike the Dionysians, who tend to turn the psychoanalytic approach into an exercise in compliance with the inferred wishes of the analyst. The goal of analytic psychotherapy—"where id was, ego shall be"—is consonant with the style of an Apollonian who needs to learn to use his or her reason in the service of unbinding and freeing his or her affect.

Furthermore, this insight-oriented therapeutic approach is consistent with the time sense and style of incorporating new approaches that characterize the Apollonians. It is a long, step-by-step therapeutic strategy. Change comes slowly, interpretation by interpretation. Change is not even a stated goal of pure psychoanalysis; rather, the purpose is to enhance the individual's understanding of the roots of his or her personality structure, a goal that will certainly intrigue an obsessional patient and not unduly frighten him or her with its prospect of some great transformation. Psychoanalysis deliberately focuses a great deal of attention on how the past influences the present personality structure. This likewise appeals to Apollonians, who tend to focus more on past and future than on the present. Unlike the client-centered approach, psychoanalysis does make assumptions about the nature of humans. The power and socialdrive theories derived from psychoanalysis (Adler 1927; Rank 1929; Reich 1972) and theories about humans in relation to the cosmos (Jung 1964) all involve inferences about humans and thus are not as "pure" as Rogers's premise of starting at zero expectation. Because of the implication that the therapist in these neo-Freudian approaches has some awareness of the desired direction for the patient in terms of a contextual concept of humans, there are apt to be more occasions for confrontation in these therapies. The data from the patient give the therapist the opportunity to perceive contradictions in comparison to the therapist's own theory of personality. The resulting interpretation can be a confrontation as well as an exploration.

It has been our experience that obsessional and anxiety disorder patients in general demonstrate somewhat constricted affect, which is consistent with their tendency to isolate and displace feelings and overinvest their cognitive processes with importance. When they suffer emotionally, it is usually with a sense of despair rather than with an intense depression. These patients require assistance in disentangling the cognitive knots in which they find themselves bound (Laing 1970) (Figure 18–3). They become immobilized by their anxious desire to understand everything, to reason through emotional problems, to put everything in their life in order. They need to be guided in the use of their reason in a manner that respects their desire to understand but that gently loosens their need to rationalize.

Therapies for Odysseans

Patients who have clinically obvious depression often respond well to a psychotherapeutic approach that emphasizes an alternation between confrontation and consolation, mirroring the patient's fluctuation between periods of activity and despair. Approaches such as Gestalt therapy (Perls 1969, 1970), with its emphasis on facing the here and now and confronting patients in one's real or unconscious world, can be quite helpful. The Gestalt approach can be quite effective in mobilizing affect in an individual who is unsuccessfully attempting to ignore it. The importance of "insight" is minimized in Gestalt therapy.

Often, group therapies are very helpful for Odysseans. They confront an individual with his or her withdrawal and depression and at the same time provide a series of supportive relationships when consolation is in order. In his study of curative factors in group psychotherapy, Yalom (1995) found that the most important curative factors listed by group patients involved a mixture of insight, catharsis, interpersonal learning, and an existential recognition of responsibility for oneself. These patients felt that they had been helped most by coming to terms with parts of themselves that they had been unaware of or had not accepted, by learning to express feelings, by coming to terms with other group members' opinions of them, and by accepting more responsibility for their own actions.

These factors have an important affective and interpersonal component: The group members stressed the importance of self-acceptance and self-expression at least as much as any particular content or insight gained about themselves. Acceptance was at least as important as discovery of insight. Thus, exploration is only one of the many factors operative in group therapy. This approach provides a mixture of exploration, confrontation, and consolation that seems especially helpful to patients with reactive depression in what we call the Odyssean group. We have found that Apollonian patients are often frightened of group therapy. In particular, obsessional patients are often sufficiently rigid in their interpersonal contacts that they often have difficulty in learning from a group experience (Yalom 1995).

We have also found that the existential psychotherapies are particularly relevant to Odysseans (Yalom 1980). Exploration of the four fundamental existential issues in Yalom's theory—death, freedom, meaning, and isolation—while trying to remove obstacles to true openness and intimacy in therapeutic and other relationships, is consistent with the affective and interpersonal style of many Odysseans. Furthermore, the existential emphasis on orientation to the future, to reordering priorities in the face of the limitations of existence, is also congruent with the more action-oriented and less exploratory style of Odysseans.

The logotherapy of Victor Frankl (1966), for example, places a strong emphasis on consolation—the therapist counters the patient's sense of isolation and depression by sharing in his or her world. The goal of such psychotherapy is genuine connectedness with another person rather than insight. Understanding of what a person is is viewed as a reification of personhood. Insights are processed as necessary obstacles to be overcome. Knowing what someone is is seen as a substitute for experiencing him as he is (Havens 1974). To borrow from the philosophical model, the exploratory psychotherapies are more idealist: They make understanding the essence of a person—insight—the

primary criterion for change. The existential therapies, on the other hand, make existing with the patient coincidental with an understanding of his essence. To truly be with the patient—bracketing one's preconceptions of him—is to allow for the possibility of change.

The emotional encounter at times requires confrontation-for example, Minkowski's (1970) famous outburst of frustration at a psychotic patient with whom he had lived. Minkowski later felt this was a crucial step in his process of contacting this patient with autism. At the same time, consolation is very important. Frankl (1964) reports having treated an older man with an acute reactive depression subsequent to his wife's death. Frankl asked him to think about the pain his wife would have gone through if he had died first. The patient reportedly radically altered his perspective on the situation and was consoled in his grief. Such approaches, however, require patients who are sufficiently attuned to the importance of interpersonal relating as opposed to strictly intellectual process-that is, they must be willing to engage in a therapy that values relatedness above insight. It has been our clinical impression that depressed patients with Odyssean characteristics meet this criterion and are good candidates for such therapeutic approaches as Gestalt, group therapy, and existential psychotherapy.

Therapies for Dionysians

A third group of psychotherapies emphasize persuasion and guidance over such factors as insight, confrontation, and consolation. In this type of psychotherapy, the psychotherapist becomes more authoritarian and directive, emphasizing *what* the patient is to do rather than *why* the patient should do it. The therapist seeks to provide a cognitive structure for the patient rather than to develop a pattern of meaning. The strength of the relationship with the patient becomes especially important because this therapy involves an active intervention in the patient's life. Some of the behavior modification approaches fall within this group in that they focus on directing behavior with relatively little interest in insight. Many kinds of counseling and consolation also fall within this group, and the therapist is freer about giving advice and support than he or she would be in a more exploratory approach.

It has been our clinical experience that psychotherapy emphasizing compassion and guidance is especially relevant to decompensated Dionysians who have some of the varied and shifting dissociative and

conversion symptoms. The association between dissociative and conversion symptoms and hypnotizability, although the subject of recent research (Roelofs et al. 2002a), is hardly new. In Studies on Hysteria, Breuer and Freud (1893-1895) noted, "What we should be doing would be first to assign the phenomena of hysteria to hypnosis, and then to assert that hypnosis is the cause of those phenomena." Highly hypnotizable people with symptoms such as conversion disorder, fugue states, dissociative states, and interpersonal difficulties are often quite dependent and demanding and yet relatively disinterested in insight. Recalling the compulsive triad diagram (see Figures 5-1 and 18-3), they are frozen into a pattern of compulsive compliance. Dionysians display amnesia to the various signals to which they are complying and a relative disinterest in rationalizing, but they are capable of producing dramatic and incongruous rationalizationstrance logic. Their tendency to please, willingness to suspend critical judgment, and absorption in the here and now make them eager for a psychotherapy situation that provides them with structure. Such an approach is complementary to their dependence, emphasis on affectivity and relatedness, and tendency to comply.

The Grade 5 Patient and Insight Therapy

We discuss the structured psychotherapy of the highly hypnotizable patient in more detail in Chapter 19, The Grade 5 Syndrome: Special Considerations in Treating the Dionysian. In view of the widespread use of exploratory psychotherapy with such individuals, it is worth noting that many highly hypnotizable patients find themselves befuddled by cognitive, insight-oriented psychotherapy. When a Dionysian patient is presented with the inquiring "Why?" the typical response is not, "What a fine occasion to gather more understanding about myself," but, "My God, what does the therapist expect me to say? What am I supposed to think?" In such a situation, innocent inquiry on the part of the therapist can set off anxiety or panic in the patient because of the urge to comply. As presented in the following case example, a sense of inferiority often is experienced by the grade 5 patient.

A brilliant, troubled young man (T.C.) entered intensive psychoanalysis after a casual remark that he "must be homosexual" left him so anxious that he had difficulty concentrating on his studies. He felt more despairing and disjointed after a year of therapy than when he began. During the analyst's month-long vacation, the patient felt much better-his old gloom was gone-until the doctor's return. His emotional difficulties led to his being granted a leave of absence from his college, but the Selective Service then informed him that his student deferment status was valid only if he remained in school. His analyst wrote to the Selective Service on the patient's behalf. Not surprisingly, the young man opened the letter and read that he was, among other things, "psychotic." The man had the self-protective sense to ask the doctor, "When you called me psychotic, did you really mean that, or did vou sav it in order to get me a medical deferment?" The doctor responded with silence, whereupon the patient grew anxious and raised the question again. The analyst said, "Why do you ask?" The patient of course pressed further, and finally the doctor replied, "Well, if you noticed, I didn't say that you were irreversibly psychotic."

Such an approach might have been grounds for exploratory discussion in treating an Apollonian, but it created appalling anxiety in this young man. His mother intervened during his psychoanalysis, seeking help for her son. Examination revealed him to be a grade 5, and this new insight altered the therapeutic approach to his problem. The patient shifted into a new treatment setting, and within a few weeks, using the knowledge of his grade 5 characteristics, his clinical picture was transformed from one of chronic panic to an acceptance of responsibility for his actions. In a few months, he was able to return to his pre-illness level of excellent academic work. He has since completed his schooling successfully, is well launched on his chosen career, and is married and a father.

Often, grade 5 patients have to be literally salvaged from the confusion and abrasiveness of "why" therapy. They require a transition period in which they can reorient themselves and experience the relief and support of establishing guidelines for a new therapeutic perspective.

There is a growing accumulation of clinical data that suggests introspective psychoanalytic therapy is contraindicated for the grade 5 patient and in some instances may seriously aggravate the patient's turmoil without concurrent clinical insight or benefit. One can argue that after the crisis period is alleviated, there may be a limited role for introspective therapy in such cases provided it does not exceed the pace of the patient's curiosity. At the same time, it is interesting to observe how little curiosity these patients have about themselves once their crisis is resolved.

This is consistent with our centering concept (see Figure 5–6). Once the patient is able to recognize and control her frozen tendency to comply with external cues, she can perceive more alternatives and enhance the use of cognitive resources. For example, in the case example just presented, the young man was able to alter his perspective on the homosexual anxiety that had brought him to treatment in the first place; he realized that he was disturbed by the comment, not because it represented some deep truth about himself, but because he was so prone to uncritically accept cues from others. With this new security and perspective, he became able to modify his Dionysian tendencies. In fact, he became quite interested in understanding these aspects of himself and in studying the psychotherapeutic approaches relevant to different types of people. By adding this cognitive framework to his Dionysian makeup, he began a process of centering.

Compliance in Therapy

At times, as T.C.'s case illustrates, the grade 5 patient copes with anxiety and uncertainty in the therapy situation by picking up cues from the nature of the inquiry by the therapist and using them to provide a response that she surmises will fulfill the therapist's expectations. The therapeutic interaction is reduced to a charade in which the patient artfully elaborates on the therapist's theme rather than uncovering information about herself. It is likely that the reason why many analysts regard patients with hysteria as easily treatable patients is because they are so responsive. In the absence of careful examination, the therapist and the patient begin to operate on the assumption that the information produced is an accurate recall of real events or fantasies rather than convenient rationalizations to cope with pressure for compliance provoked by the analytic process of inquiry. This problem plagued even Freud, who was misled in the development of his theories of infantile sexuality by data supplied by compliant hysterical patients to the effect that as children they actually underwent episodes of sexual seduction by their parents:

I thus overestimated the frequency of such events (though in other respects they were not open to doubt). Moreover, I was at that period unable to distinguish with certainty between falsifications made by hysterics in their memories of childhood and traces of real events. (Freud 1906, p. 275)

Because highly hypnotizable patients are so compliant, this compliance can be used in a therapeutic technique that emphasizes guidance and persuasion. Such patients are likely to present themselves in severe emotional and interpersonal distress and are not likely to see their problem in a cognitive framework or to be terribly curious about reducing it to such a framework. The burden falls on the therapist to help the patient isolate and define specific treatable problems—to apply the puzzle form to the vague problem areas and dysphoria in the patient's life. The therapist acknowledges the patient's need for cognitive structure and supplies it directly rather than indirectly as in the exploratory psychoanalytic approach.

Organizing and Using the Therapeutic Strategies

The spectrum presented in this chapter of psychotherapies from exploration to guidance is guite brief and simplified. There have been other approaches to matching intervention to personality types. For example, Boyer (2000) uses Kohut's typology to distinguish between a therapy based on ambivalent conflict for "guilty man" and one based on a restructuring expressive approach for "tragic man." We see an analogy between the former and Apollonians, and the latter and Dionysians. We have hardly provided a comprehensive listing of the myriad of psychotherapeutic strategies. This chapter provides one possible framework for organizing various psychotherapeutic approaches in relation to the psychopathologies and personality styles of the patients seeking therapy. Our overall approach is to match the style of the therapy to the personality style and inclinations of the patient. More "head-oriented" patients seem to do better with cognitive-oriented, exploratory psychotherapy. Highly hypnotizable patients with hysterical problems seem to prefer a therapeutic strategy that emphasizes the importance of the relationship between the patient and the therapist and the provision of cognitive structure rather than exploration. Our thinking continues to develop in this area and is supported by clinical research from a multitude of investigators (H. Spiegel and Greenleaf 1992; H. Spiegel et al. 2000).

Some may argue that a given therapy belongs in a different place on the schema. For example, Karasu (1977) published an article classifving the psychotherapies into three groups: dynamic, behavioral, and experiential. He categorizes Rogers's client-centered therapy in the same group with the existential psychotherapies of Binswanger, Boss, and Frankl. In his framework, the dynamic psychotherapies consist of psychoanalysis and all the neo-Freudian movements. The behavioral group consists primarily of variations on the behavior modification theme, including social-learning psychotherapy and biofeedback training. There are considerable areas of overlap between his more comprehensive listing of the psychotherapies and our categorization. His tendency is to classify these psychotherapies into discrete units. Our preference is to place the psychotherapies on a continuum with the cognitive psychotherapies on one side and to shift gradually toward those therapies that emphasize affect and relatedness rather than insight.

The reader may object that this formulation makes it too "easy" for the patients—that a good psychotherapy challenges a patient to overcome his or her limitations. In other words, an intellectualizing patient with obsessional characteristics should seek a therapy situation that forces him or her to relate intensely to the therapist and that compliant dissociative patients should learn to use their cognitive capacity to understand their life situation more. As we see it, the issue involves making the best use of the patient's resources in the hope that he or she will become more balanced and perhaps later be able to use less characteristic strategies. For example, it is quite possible that after a given problem is resolved, the highly hypnotizable patient may raise some questions about how he or she happens to be so vulnerable to manipulation and dependency relationships. This may be an occasion when a more exploratory and cognitive approach can be used to develop what amounts to "ego scaffolding" or ego-strengthening procedures that can reacquaint this patient with the value of cognitive consolidation. In this sense, the treatment procedure can shift in the direction of consolation and confrontation. Similarly, when an Apollonian in brief symptom-oriented treatment or in an intensive insight-oriented psychotherapy has reached a point of achievement, the freeing of his or her affect from the constrictions of isolation and displacement may provide an occasion to move toward the mid-range, where a more emotive affect-oriented psychotherapy would be important. In this sense, a kind of centering may occur

after the initial phase of therapy, and patients on either extreme may move toward the Odyssean mid-range (see Figure 5–6).

Thus, after any patient consolidates at a new level, it may become necessary to alter the treatment strategy to take into account this new integration. If, with persuasion and guidance, a Dionysian has managed to make significant life changes or has overcome a troubling symptom, he or she may request and benefit from a therapy that is more confrontational. On the other hand, an obsessional Apollonian, having used cognitive capacities to allow him- or herself to experience more affect, may develop a reactive depression that is best treated with consolation. We view the resilient therapist as thinking in ever-shifting terms, making use of such categories as Apollonian, Odyssean, and Dionysian as points of departure and orientation to therapy rather than as fixed prescriptions for therapy.
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CHAPTER 19

The Grade 5 Syndrome: Special Considerations in Treating the Dionysian

Highly hypnotizable individuals who also have psychological problems present special difficulties for the psychotherapist. As discussed in Chapter 18, Spectrum of Therapies, a well-intentioned exploratory effort can be turned into a futile exercise in compliance by a patient who seeks to provide answers that the therapist wants, rather than engaging in active mutual exploration. In Chapter 5, The Person With the Problem: Apollonians, Odysseans, and Dionysians, we described the highly hypnotizable individual in terms of personality style and characteristics such as a relative proneness to trust, a reliance on feeling rather than reasoning, a tendency to live in the present, and a capacity for intense focal concentration. When severe psychological decompensation occurs, these normal attributes are exaggerated, and the individual becomes the victim of his or her own capacities rather than the master of them. A proneness to trust becomes a pathological compliance with people in his or her environment, a preference for feeling over reason becomes an unwillingness to think through the consequences of action, a tendency to live in the present becomes a denial of past precedents and future consequences, and the capacity for intense concentration becomes transformed into dissociative episodes such as fugue states.

These patients, when stressed, often present with hysterical symptoms, conversion reactions, dissociative episodes, or interpersonal difficulties, including classic hysterical sexualizing of the nonsexual and desexualizing of the sexual in relationships. The initial clinical impression can be confirmed or challenged by the patient's score on

The material in this chapter appeared, in a different form, in Spiegel H: "The Grade 5 Syndrome. The Highly Hypnotizable Person." *International Journal of Clinical and Experimental Hypnosis* 22:303–319, 1974.

the Hypnotic Induction Profile (HIP). This discussion is meant to describe patients who score in the 4–5 range on the HIP. In this chapter, we describe some of the behavioral and personality attributes that we have observed in this relatively rare group of patients. We go on to discuss what seems to us to be the most appropriate and effective psychotherapeutic strategy when these patients require intensive treatment.

Configuration of Traits and Characteristics

High Hypnotic Induction Profile Score

Dionysian individuals usually score in the 4–5 range on the HIP, with a high eye-roll, immediate hand levitation, and a profound sense of differential control between the hypnotized and nonhypnotized hand. They are usually capable of experiencing age regression in the present tense, sustained posthypnotic motor alterations and hallucinatory responses in compliance with a cue, and/or global amnesia for the entire hypnotic episode. If the individual is capable of all these experiences, he or she is considered a grade 5; if only one or two, a grade 4–5; and if none, a grade 4.

Posture of Trust

In an interpersonal situation, grade 5 patients exude an intense, beguilingly innocent expectation of support from others in a somewhat atavistic, prelinguistic mode. This incredibly demanding faith can well be described as a posture of trust, in that the faith or trust goes beyond reasonable limits to become postured and demanding. They demand that all attention and concern be focused on them. This demand is often so tenacious as to feed any latent grandiosity a therapist may have. Therefore, to avoid entrapment, the therapist must know where he or she ends and where the subject begins. Undoubtedly, the grade 5 patient is the patient that Bernheim (1889) had in mind when he admonished his students that it is a wise hypnotist who realizes who is hypnotizing whom. In conjunction with the feeling of trust, grade 5 patients have an enduring feeling of hope combined with a lack of cynicism. Whatever the difficulties of their therapy, they retain faith, hope, trust, and the conviction that therapy is good for them and that the therapist has real concern for their well-being.

Suspension of Critical Judgment

A third predictable trait of grade 5 patients is a willingness to replace old premises and beliefs with new ones, if necessary, without the usual cognitive review of the Apollonian. During the trance experience, an apparent suspension of the usual level of critical judgment is consistent with the posture of trust. Tenacious clinging to the past is absent.

This receptivity is an asset in applying a treatment strategy. It is postulated that all of us live with a more or less organized (conscious and unconscious) premise system—a combination of assumptions, beliefs, convictions, myths, biases, prejudices, and knowledge that forms the cloud through which we perceive our world—a myth-belief constellation, or possibly a metaphor-belief cluster, or simply a metaphor mix. We are able to cope with some aspects of these metaphors better than others. Grade 5 individuals especially are able to shift the components of their metaphor mix to reach new treatment goals.

As mentioned in Chapter 16, Psychosomatic Disorders and Conversion Symptoms, Ortega y Gasset maintains that "the metaphor is probably the most fertile power that man possesses" (Marias 1970). As we use this power, we may as well use it with more knowledge. If metaphors were ignored, our language would be largely ineffective (Marias 1970). If we as therapists avoid metaphors, we miss one of our best therapeutic devices (H. Spiegel and Shainess 1963).

Affiliation With New Events

The grade 5 person has an incredible ability to affiliate with new events—either concrete events or perspectives—with an almost magnetic attraction to them, as illustrated by the following case example:

Dorothy, a grade 5, said that even though she had overcome a major crisis in her life, she still remained a grade 5 (once a

5, always a 5); but she had learned the advantage of artfulness in using the associated traits. The sight of a friend crying would evoke tears before she even knew the cause of the sadness—such was her receptiveness to others. With therapy, she became aware of her empathic sensitivities and learned that she need not relate others' symptoms to herself. Her ability to affiliate led to receptiveness to treatment, especially when in the state of intense concentration called *hypnosis*.

Relatively Telescoped Sense of Time

The time perspective of grade 5 persons is unusual. They seem to have a relatively telescoped time sense, focused almost exclusively in the present rather than in the past or the future. The paradox is that only grade 5 people can regress as they do. Typically, when a grade 5 person regresses to a first or fourth birthday, for example, it is actually experienced in the present tense as a first or a fourth birthday. When anybody less hypnotizable similarly regresses, he may have some fragmentary experience, but he is always aware of the actual present time and that he is recalling an event of the past. Although a grade 5 patient's regression may uncover a spectacular and revealing memory, he does not relate the memory to present considerations or understanding. Layer upon layer of memory is available to him, but he keeps it dormant and does not apply it to current decision making.

Trance Logic

Grade 5 patients are strikingly unaware of even extreme logical incongruity. This is the phenomenon that Orne (1959) identified as "trance logic." Although more or less evident in everybody, it is less subtle and even more dramatically observed in grade 5 patients. Those with less hypnotic capacity tend to relate to fragments of past memories in a judgmental way. Because they are prone to assay critically each new life experience as it unfolds, they usually retain a judgmental distillate of the event rather than the entire detailed sequence and its effects. They focus more on derivation than on affiliation; hence, past-time perspective remains intact.

The incongruous world of today might be less jarring to all of us if we shared more of this feature that is so extreme in the grade 5

individual. For example, during the Vietnam War, the public was told that in order to secure a village, the U.S. military had to destroy it. We might be able to understand and accept without disturbance the military logic of the statement if we were all grade 5 individuals. For most of us, of course, it is very difficult to sufficiently immerse ourselves in the military premise system so that we can make peace with that kind of logic, because it violates so many other premises.

On the other hand, trance logic can be comfortable, making it easy for the subject to produce and accept changes. A delightful example of this logic can be found in one of Sholem Aleichem's stories. Tevya, a milkman, listening to two friends arguing—one is taking the "a" position and the other the opposite "b" position—is called on to decide who is right. Tevya listens to "a" and says, "You're right." He then listens to "b" and says, "You're right." A third man protests this judgment as impossibly illogical, and Tevya says, "You're right, too."

Excellent Memory

A somewhat less-discernible trait of grade 5 persons is the possession of an excellent memory: Their great capacity for total recall makes regression feasible to them. They are especially talented in rote and eidetic (visual) memory, and when highly motivated to learn something, they can do so almost the way a sponge absorbs water. This learning is uncritical; they take in everything. Critical judgment does occur later, calling on the information already incorporated.

One example of this kind of memory was provided by a medical student who was a grade 5. He said that after seeing an anatomy diagram, he could so vividly recall his visual experience that when answering examination questions on the subject, he felt as though he was actually copying from the diagram. So strong was his memory that he sometimes found himself with a minor moral problem: Was he cheating?

Capacity for Concentration

Grade 5 people have an intense capacity for concentrating and for dissociating while doing so. This ability is reflected in the following comment by a talented artist:

When I paint, I have no knowledge of what I am doing. Only after a moment of returning consciousness do I become aware of what I have been doing. Then, however, I have no hesitation about making changes or destroying images because the painting has a life of its own. My mission is to bring forth that life.

This is an eloquent description of such involvement with the creative experience that only after it is over is one able to assess the creation objectively. It is almost as if the creation were on another plane from the creator.

A similar example comes from a New York playwright who learned this hypnotic method of concentration and visual imagination. He visualized a stage, and having decided, for example, to work on Act 1, Scene 2, he entered a trance state. He placed three actors on his imaginary stage and in effect said to them, "Go ahead; I'll listen." After approximately 5 minutes, he would bring himself out of the trance state and write down what "they" had said and done.

In the intense state of concentration that everyone experiences from time to time, there exists a more or less concomitant state of dissociation, which grade 5 persons experience vividly. Many times, painters, writers, and novelists especially say of a finished work, "That character fascinates me. It's as if I didn't write him; he created himself, and I kept getting more and more amazed at what he was doing as we went along in the story." This intense concentration is what makes the creator able to be with his or her creation and alongside it at the same time and able to relate to that concentration in a guided, disciplined, yet dissociated way. It is also the critical feature that characterizes the perceptual alteration common to all hypnosis: The observed motor phenomena are secondary to the perceptual shift.

Fixed Personality Core

Underneath this wonderful, malleable overlay is a narrow, hard, fixed core—a dynamism so fixed that it is subject to neither negotiation nor change. This core corresponds to "imprint learning" or perhaps a "foundation experience" (H. Spiegel 1965). It is a special kind of learning that occurs at critical times and remains relatively intact throughout the subsequent development of sophisticated, associative forms of learning. Aspects of this kind of learning can be found within all HIP grade groups, but it is especially prominent and clinically significant in the grade 5 group.

This fixed personality core is expressed linguistically in a primitive, paleological mode. An amusing illustration in a sociological aspect was provided by a Haitian native. When asked what the distribution of the different religious beliefs in Haiti is, he replied without hesitation, "70 percent Catholics, 20 percent Protestants, and 95 percent Voodoo." In sum, this is an illustration of hard-core nonnegotiability. The following case example provides another illustration of this trait:

A 38-year-old woman with psychogenic urinary retention was unable to initiate urination despite all forms of medical and surgical treatment. Her condition was discovered when her bladder became so distended that it kinked her urethra and she had to be catheterized. This woman was so profoundly hypnotizable that her score was virtually beyond a grade 5. Under hypnosis, it was found that her perceptual alteration was so precise that when she was regressed to age 4, she perceived the illusions of the Titchener Circle Illusion Test as any 4-year-old child would-that is, with the subtle perceptual accuracy that many very young children but few adults have. Despite her hypnotizability, repeated therapeutic counseling, and her ability to urinate when in formal trance and under firm hospital control, the patient refused to assert control over her bladder on her own. The apparent basis for this refusal lav in secondary gain factors. She was engaged in a complicated sibling rivalry situation.

The patient was married to a man who she felt was inadequate. Her younger sister's husband was visibly successful and also prosperous. She discovered that her physical difficulty made it impossible for her to engage in sexual relations with her husband, a situation that she apparently preferred. Moreover, the patient had learned how to catheterize herself with the intricate use of a mirror, and she was thus able to accommodate her bladder invalidism. A secondary "advantage" was gained by the extra care and affection she received from her sister and brother-in-law. Rather than give up these secondary gains for bladder control, she stubbornly insisted on maintaining her symptoms, however discomforting they were. For several months, her family was unwilling to alter

their behavior to reduce the secondary gains. Although her neurologist and urologist were both certain that her bladder control mechanisms were intact, the patient requested and was about to receive further surgical manipulation of the bladder sphincter. At that point, her entire family became sufficiently alarmed to alter their perspective radically, thus removing all possible gains from her invalidism. She then reestablished bladder control. What had been nonnegotiable in one setting became negotiable in another.

The problem seemed resolved for approximately 6 months because of relative discipline by the family and the patient. Then the family relaxed its guard and, surprisingly, the bladder symptom returned. Since that time, her bladder has served as a fairly accurate indicator of the family-patient relationship.

Another such patient is the woman (T.J.) discussed in Chapter 16, Psychosomatic Disorders and Conversion Symptoms, with hysterical seizures. Once she perceived that these seizures could be induced and terminated by a hypnotic signal, she insisted on retaining a certain cycle of response. She would predictably take approximately 1 minute to come out of the seizure after having been signaled to do so. This minute was gradually reduced, but she insisted on holding to a little hard-core refractory period.

These cases reveal that the surface malleability, flexibility, and ability to change that grade 5 patients possess can provide a remarkable area to work within therapeutically. However, totally resolving the hard-core dynamism is highly unlikely.

Role Confusion

The paradoxical relationship between hard-core dynamism and chameleon-like malleability, which is so sensitive to both supportive and antithetical field forces, can provoke role confusion and a reactive sense of inferiority. If the shifts and internal permutations of the metaphor occur too frequently because of environmental fluctuations, a profound and chronic sense of embarrassment may evolve along with inferiority. For example, even when the grade 5 individual performs so competently or creatively that she evokes praise from others, she is so dissociated from the performance that there is little recognition that she did it: "It just happened."

The medical student mentioned earlier who felt embarrassed and guilty about his ability to recall an anatomy diagram is a case in point. Because he felt that he had simply copied the diagram from his eidetic memory, it seemed to him that he had done nothing himself. Praise for his work by his professor merely increased his guilty sense of separation from the act—hence, his role confusion. This self-evaluation was basically honest in a subtle way, because his affiliation with rote knowledge was not authentic knowledge. He appeared to know more than he actually did.

Sluggishness in Reorientation to Internal Cues

Grade 5 individuals are often exquisitely responsive to external cues but also painfully slow in freeing themselves of external pressure and in applying their own principles or beliefs to adjusting to new situations. A less-hypnotizable person's plasticity and willingness to engage with other people in his or her own environment becomes in grade 5 patients a pathological suspension of their own critical judgment. This is rooted in the sense of inferiority we described in the previous section and also in a sluggishness of their processes of cognitive scrutiny. Many of these patients experience great difficulty in applying what they know to what they do, as the following case example demonstrates:

Sally was a grade 5 with a diagnosis of multiple personality syndrome. She found herself in a repetitive conflict with her family regarding finances. They tended to rely on her to help with their unending financial difficulties more than was appropriate. Although Sally knew that the situation was unfair to her, she had immense difficulty setting limits on her family's financial expectations of her. She would leave therapy sessions determined to "stick to her guns" and refuse the next request when the phone bill came due, but she repeatedly gave in. It was as if when external pressure was applied, she spontaneously took on another personality. It would then

take a long time for her to bring her own internal scrutiny to bear. By that time, the money was gone, and she would go through a period of depression and self-recrimination.

Thus, grade 5 individuals often become victims of their own profound trance capacity. They spontaneously form dependent and, at times, mutually destructive interpersonal relationships. They are naively trusting, self-disparaging, and intermittently depressed as a consequence. Often, they actively seek situations in which another individual provides structure that they feel they cannot provide for themselves. One such patient described herself as "a disciple in search of a teacher." This search sets the tone for treatment considerations in the intensive psychotherapy of this group of patients.

In the well-known "Sybil" case, the therapist unwittingly shifted the perspective on multiple personality issues from spontaneous transformations to directed ones. For many years, Sybil's therapist, Dr. Connie Wilbur, was treating her as a person with schizophrenia. Finally, calling the diagnosis into question, Dr. Wilbur brought her to me (H.S.) to review the case. On examination, it was clear she was highly hypnotizable, which ruled out schizophrenia, and the diagnosis was clarified as hysteria, or dissociative disorder. According to the current nomenclature, she was a grade 5 with dissociative disorder not otherwise specified. Her high hypnotizability and suggestibility made her vulnerable to interpretations from her therapist that her various problems were caused by alleged but not proven parental abuse. It was the therapist who proposed the names for her various moods and perspectives, identifying them as different personalities that Sybil was encouraged to dramatize. In recent years, audiotapes have been discovered in which Dr. Wilbur can be heard giving these instructions to her patient (Reiber 1999).

At the time when Dr. Wilbur teamed up with Flora Rheta Schreiber to write a book about Sybil, I (H.S.) was approached to join them as a coauthor because I had helped clarify the initial diagnosis, served as a surrogate therapist when Dr. Wilbur was out of town, and done some research with Sybil during the years when she was one of my teaching subjects at Columbia University College of Physicians and Surgeons. When they informed me that they were going to identify Sybil as a person with multiple personality disorder because the publisher wanted that diagnosis to sell the book, I refused to participate with them as an author because Sybil did *not* have multiple personality disorder. Her "personalities" were instructed, not spontaneous. This iatrogenic phenomenon is explored in detail in *Creating Hysteria* (Acocella 1999). To finalize the case history of Sybil and present a successful therapeutic endeavor with a happy ending, Dr. Wilbur managed to bring about a "fusion" of the many personalities. The royalties of this book were divided by the therapist, the author, and the patient. Further details of what became such an influential episode in clinical psychiatry are presented in *Freud Under Analysis* (Dufresne 1997).

Treatment Considerations

In our experience, the most effective form of intensive psychotherapy for patients with the grade 5 syndrome largely involves guidance in perceiving alternatives and in exercising choice. The therapist affiliates with their willingness to comply and their comparative disinterest in reason and explanation. He or she focuses instead on persuasion, using this compliance in the service of defining and following reasonable goals. These patients usually have to be pushed, especially at the beginning, to think out appropriate long-term goals, because their tendency is to float along with whatever external pressures happen in their lives. Thus, the therapist initially plays the part of Apollonian to the patient's Dionysian, with the hope that the patient will internalize some of this cognitive structure as the therapy progresses, or at least become more aware of and expert in using his or her own capacities for dissociation and compliance. The therapist attempts to thaw the patient's frozen pattern of compliance and to stimulate movement toward the mid-range (see Figure 5-5). This therapeutic change constitutes a centering process in which the patient acquires perspective on his or her extreme responsiveness and learns to modify it.

Central Versus Peripheral Values

Because of grade 5 patients' proclivity for affiliating with new premises, without the critical scrutiny they would ordinarily apply when not in a state of high motivation and intense concentration, it is very useful to learn about their life values. The relevant areas of their

knowledge can thus be explained to them, so that they recognize more clearly where their expertise and best critical judgment lie. In other words, they must understand clearly the difference between peripheral and basic decisions.

A colorful example of differential decision making is seen in the case of a brilliant research scientist, a man with an IQ exceeding 180 and a HIP of grade 4–5. He was an outstanding scientist, thoroughly conversant with the literature of his field. In addition, he was an expert at his hobby, the commodities market. This specialty was highly complicated, and he was very successful at it. In these two fields, he could not be misled. However, there was a catch: This man might go to a department store and let an enthusiastic salesperson convince him that what his family needed most was a new refrigerator and he would, without particular thought, order one. His wife was routinely left with the chore of returning such items. This illustrates the conflict in decision-making processes. Whatever cleverness and confidence grade 5 people have within their central areas of competence, in more peripheral areas they are likely to be guileless.

Another instance of this behavior was evidenced by an actor who made a good deal of money, if not as much as he liked to imagine. People would invariably "touch" him for money for various charities, and he readily wrote checks to comply. Admonitions from his financial advisors had little impact on him. Finally, an answer was found: He agreed to have his business manager countersign all his checks. Then, when people approached him for donations, he could still sign a check, but he also informed them, "Now you have to go to my manager," and he would shake the person's hand, adding, "and I wish you luck." Because the theater remained his central interest and his check writing was to him a peripheral issue, he had no interest or enthusiasm for learning how to internalize this discipline. Therefore, his manager served as an external and surrogate disciplinary support.

In other words, for vulnerable people, the best defense against exploitation is to offer as surrogate another person with better judgment than their own. This reinforcement is apparently essential and is an important factor of the treatment program.

Protection From Negative Field Forces

Because they so urgently need direction, certainty, and faith, grade 5 individuals are likely to be receptive to all kinds of forces, even those

antithetical to their best interests. They are uncritical and thus have difficulty in distinguishing between what is and is not good for them. The therapist must help the patient distinguish and deal with conflicts between the two.

Secondary Gain and Loss

The critical factor of secondary gain and secondary loss is related therapeutically to protection from negative field forces. Assuming a disability on the part of the patient, any resultant secondary gain must not go unchallenged; enormous damage may be done before the secondary loss manifests itself. The therapist must anticipate this secondary loss and prevent any potential dangers from being obscured by the secondary gain. He or she can then prepare the patient to avoid the secondary-gain syndrome before secondary loss develops. Timing of the therapeutic intrusion is critical.

A case example of this secondary gain-and-loss situation follows:

A 15-year-old boy injured his knee in a bicycle accident. Surgery was required. After 3 months, his surgeon and physiotherapist agreed that full leg movement should have returned; nevertheless, partial paralysis remained in the leg. After a year, the boy was still using a crutch, despite no physical damage. Use of the crutch interfered with some of his school work and his social life and was of great concern to his parents. When the parents complained about the situation in the boy's presence, it became evident that the boy was enjoying their concern about the situation.

The boy was a grade 5. A trance state was induced, and during it, he was very responsive. At this point, remembering Al Capone's observation that "You can get much further with kindness and a gun than you can with kindness alone," the therapist decided to confront the young man with some options. He told him that he was perfectly able to discard the crutch, and they both knew it. The parents, of course, knew nothing of this discourse, and the therapist promised that he would not disclose it. He then offered the following choices: Either the young man could walk out of the office without his crutch, or he could discard it within the next few days. However, if the boy was still using it when the father called the following Tuesday, the therapist would tell the father that the paralysis was a posture and a fake.

When he emerged from the trance state, the boy claimed to have no memory of the experience. The therapist simply announced his conviction that the boy knew how to reestablish mastery over his leg and that the boy would look forward with great joy to discarding his crutch.

Two days later, the boy's father asked the therapist whether it would be all right to honor his son's request to go to school without his crutch, providing that he be allowed to use it when he came home (if he felt it necessary). The therapist agreed with alacrity, and when the young man returned, he announced that he did not need his crutch anymore. His happy parents congratulated him.

In this case, the trance mode was used as a facade behind which the patient could salvage his self-respect and avoid total exposure and humiliation. The secondary gain and loss factors were prominent, though not openly discussed. The boy needed a way to be honorably released from the situation he had created, which the therapy gave him. Thus, the secondary gain from the extra attention he had been receiving, having been superseded by the secondary loss, was no longer useful.

Action Compliance

Grade 5 people do not simply derive and formulate new abstractions; they require immediate action to retain their value. They also tend to look at a simple proposal as a demand and to concretize it without appreciating its full metaphorical meaning to the point that they may mistakenly use a metaphor as a concrete command to perform. An example of this is that of the young man who responded to his doctor's metaphorical admonition to leave home and go to Alaska by literally traveling there.

Supportive Guidance

The most useful therapy for grade 5 syndrome involves a great deal of guidance and direct support, with an emphasis on guidelines to

help the patient perceive the metaphor mix in her life. By clarifying the relative importance of her values, the patient's goals become clear. In other words, she learns what can and cannot be changed in her life, and the therapist is able to encourage the patient in her choice. She needs not only to recognize her options but also to develop the sense that she has the right to exercise them.

A humorous approach is sometimes invaluable: What better way to perceive the irony or the uncertainty of what one is doing? Often by laughing with (never at) the patient, it becomes possible to offer alternatives that otherwise would be inconceivable. In the case of S.M., a woman whose treatment for a dog phobia was described in Chapter 14, Phobias, the use of humor was important:

The therapy began with one simple concept, presented with casual humor, that the fear of animals is natural and understandable. I (H.S.) admitted that I, too, was afraid of animals. S.M. was startled by my confession and looked ready to leave the office, asking, "Then what am I doing here?" I pointed out that the fear of animals is a sensible fear; however, there is a substantial difference between being afraid of tame animals and being afraid of wild ones, and we laughed together. I also reminded her that when a dog sees a frightened person it senses the fright; a dog feels more secure in the presence of secure humans. This gave her the option, not previously realized, of offering a dog security and comfort rather than dwelling on her own anxieties. She left the office muttering to herself, "Dog, friend; dog, friend." That single concept, presented with humor, was enough to help her to begin to overcome a lifelong fear.

Duress-Evoked Symptoms

Under duress, grade 4–5 patients may develop a syndrome with features of histrionic acute psychotic, acute stress, and conversion disorders. It is a transient, mixed state, often of frightening appearance even mistakenly thought to be a psychosis. The duress and confusion may intensify to such an extent that they lead to hysterical psychosis. However, grade 4 and 5 people rarely become schizophrenic. When the treatment strategy alleviates stress, clarifies somatic metaphors, and accounts for secondary gain and loss, these patients usually go rapidly back to their previous states.

All too often, such people are misdiagnosed and hospitalized as persons with schizophrenia. It is not surprising to find people with high eye-rolls and high intact profile scores in the back wards of many hospitals. Unfortunately, they have been conditioned by society and the hospital milieu to behave as though insane. This misdiagnosis has even been repeatedly reinforced in the field. Furthermore, the old-fashioned notion of hysterical phenomena as being limited to women is sheer nonsense: They occur equally in men. The old theory that an aberration of the uterus is a necessary prerequisite to the illness explains the use of the Greek root *hyster*, meaning uterus. It has about as much relevance to the disease as *hypnos* does to hypnosis.

Differential Diagnosis

Another feature of grade 4–5 people is their dramatic surface malleability, which can falsely appear as a psychiatric syndrome ranging from mild to severe. Under situational stress, they may simulate the critical characteristics of the various psychotic categories. Thus, differential diagnosis of the condition is crucial. It is like the role of syphilis in internal medicine; many internists believe that if a diagnostician can understand the differential diagnosis of its symptoms, with all their subtleties, he has mastered the field of diagnostic medicine.

The same situation prevails in psychiatry when the clinician is dealing with grade 5 syndrome and hysteria. An understanding of the chameleon-like quality of grade 4–5 individuals, especially under duress, and the multiple forms of their hysteria enables the clinician to differentiate with more precision the stressed grade 5 patients from patients with schizophrenia, personality disorders, mental retardation, and neurological deficits (Williams et al. 1978), and others who are likely to have decrement profiles. With this clarification, treatment choice can be more precise, as illustrated in the following case example:

After an unhappy experience with surgery, a doctor was carelessly given too much Demerol. He left the hospital a Demerol addict. At the time of his treatment, he had been addicted for 3 years and was vividly aware that if he did not overcome the habit he would be discovered. He thus was strongly motivated. Examination revealed him to be a grade 4–5. Hard work enabled him to reorient his metaphor mix, learn more about the clinical assets and liabilities of being a grade 5, and subsequently overcome his problem. The therapist and the patient freed themselves from the discouraging *addict* connotation; instead, the patient was seen as a grade 5 person caught in a series of blunders. With appropriate therapy, he extricated himself from the situation and since then has been drug free.

Conclusion

The high eye-roll and the high, intact profile tend to be found in a trusting person who easily suspends his or her critical judgment, readily affiliates with new metaphors, emphasizes the present without too much concern for past and future perspectives, is comfortable with incongruities, has an excellent memory, is capable of intense concentration, and may have a hard-core stubbornness surrounded by a malleable overlay, which may provoke role confusion and a sense of inferiority.

Because of these traits, the treatment strategy delineates specific areas of competence and thereby clarifies peripheral areas in which critical judgment is weaker. It arranges for external supports, increasing sensitivity to and protection from exploitative and antithetical field forces; brings out awareness of secondary gain and loss factors; clarifies the patient's beliefs and metaphor mix with guidelines for acting on them; and provides ample opportunity, especially in the supportive guidance atmosphere of the treatment situation, for the patient to perceive alternatives and to appreciate and exercise his or her right to use them.

Under duress, grade 5 patients can assume symptoms of hysteria and, under severe distress, hysterical psychosis, which may be misdiagnosed as schizophrenia. Because of the highly favorable therapeutic potential of this group, an accurate differential diagnosis is crucial. Specifically, grade 5 individuals must be identified so that if they do present for help, they can be offered appropriate therapy of the *what* rather than *why* variety, at least during the crisis period.

The reader may wonder at the absence of any reference to hypnosis in the treatment of these highly hypnotizable patients. In general,

the problem is not of putting them into trance states but of keeping them out of trance. They are victimized by their trance proneness and, if anything, need to be taught how to be nonhypnotized rather than hypnotized. Thus, with the exception of occasional uses for anxiety control or abreaction, hypnosis has little place in the intensive psychotherapy of highly hypnotizable patients. It is the identification of this profound hypnotic capacity that is critical to their therapy.

CHAPTER 20

Hypnosis in the Treatment of Acute Stress Disorder, Posttraumatic Stress Disorder, and Dissociation

In Chapter 2, Formally Induced Trance Phenomena, we defined hypnosis as having three components: absorption, dissociation, and suggestibility. There is growing evidence that trauma elicits dissociation, so it makes sense that hypnosis should be a useful tool for understanding and treating traumatic reactions, including acute and posttraumatic stress disorders (PTSDs) and dissociative disorders. The hypnotic state can be understood from this perspective as a kind of controlled dissociation that can be used to model the uncontrolled dissociation that such posttraumatic phenomena as flashbacks, numbing, and amnesia represent (Butler et al. 1996). One line of evidence supporting this point of view derives from studies showing that the presence of PTSD symptoms is associated with high hypnotizability (D. Spiegel 1988a; Stutman and Bliss 1985). Hypnosis can represent a safer way to enter, use, and exit such dissociative states, providing fertile opportunity for therapeutic intervention. It is no accident that interest in hypnosis often peaks during periods of history that are replete with exposure to traumatic experiences, such as World War II (Kardiner and H. Spiegel 1947) and the Vietnam War (Brende and Benedict 1980; D. Spiegel 1981, 1988a; Stutman and Bliss 1985).

DSM-IV (American Psychiatric Association 1994) and DSM-IV-TR (American Psychiatric Association 2000) contain a new diagnostic category, acute stress disorder (ASD), which has prominent dissociative symptoms, along with intrusion, avoidance, and hyperarousal symptoms, in recognition of the frequency and predictive importance of acute dissociative reactions to trauma. Specific elements of dissociation and the related phenomenon of hypnosis may influence

trauma-related memory. Evidence that absorption influences encoding, dissociation storage, and suggestibility retrieval is reviewed in this chapter. Elements of effective psychotherapy for individuals who have been exposed to trauma include uses of hypnosis, grief work, transference, and emotional expression in the exploration of traumatic experience. The similarity of hypnotic to traumatic dissociative states can be used to teach control and mastery over traumarelated dissociative symptoms.

Trauma and Dissociation

Trauma can be understood as the experience of being made into an object, a thing. One suddenly becomes the victim of someone else's rage, of nature's indifference, or of bad luck. The essence of traumatic stress is the experience of helplessness and loss of control over one's body rather than fear or pain. There is growing clinical and some empirical evidence that dissociation occurs as a defense during trauma—as a means of maintaining mental control just as physical control is lost (Bremner et al. 1992; Cardena and D. Spiegel 1993; Classen et al. 1998; Kluft 1985b; Koopman et al. 1994; Putnam 1985; D. Spiegel 1984, 1997). Many people during and in the immediate aftermath of acute trauma report being dazed, being unaware of serious physical injury, or experiencing the trauma as if they were in a dream. One young man whose leg was so badly broken in a motorcycle accident that it was eventually amputated had initially managed to save his life by walking off of the freeway where he was lying without conscious experience of pain while imagining that he was at a mountain lake fishing with his father. He used his concentration on this imaginary scene to detach himself from the immediate experience of terror, pain, and helplessness. Sexually or physically abused children often report seeking comfort from imaginary playmates or imagined protectors, or by absorbing themselves in a nearby visual pattern such as wallpaper or a view of a garden. Many rape victims report floating above their body, feeling sorry for the person being assaulted below them. Similar experiences accompanied by physical anesthesia have been reported by corrections officers being beaten during a prison riot (Hillman 1981) and by accident victims (Noves and Kletti 1977).

Posttraumatic Dissociative Symptoms

A high prevalence of dissociative symptoms has been reported in a multitude of studies of immediate psychological reactions within the first month after a major disaster. Furthermore, some studies show that such symptoms are strong predictors of the later development of PTSD. These studies have included the experiences of survivors, victims and their families, and rescue workers in a varietv of disasters, including the Coconut Grove nightclub fire (Lindemann 1944 [1994]), the 1972 Buffalo Creek flood disaster caused by the collapse of a dam (Titchener and Kapp 1976), automobile and other accidents and serious illnesses (Noves et al. 1977; Noves and Kletti 1977; Noves and Slyman 1978), correctional officers' experiences as hostages in a New Mexico penitentiary (Hillman 1981), the collapse of the Hvatt Regency Hotel skywalk in Kansas City (Wilkinson 1983), a lightning strike disaster that killed one child with others present (Dollinger 1985), a 1984 tornado that devastated a North Carolina community (Madakasira and O'Brien 1987), an airplane crash-landing (Sloan 1988), an ambush in a war zone in Namibia (Feinstein 1989), the 1989 Loma Prieta earthquake in the San Francisco Bay Area (Cardena and D. Spiegel 1993), the Oakland-Berkeley firestorm (Koopman et al. 1994), witnessing an execution (Freinkel et al. 1994), and shootings in a highrise office building (Classen et al. 1998). Two recent surveys of responses to the 9/11 terrorist attacks in the United States indicated that 90% of the population had some acute stress symptom-44% to a serious degree (Schuster et al. 2001)-and 5-8 weeks after the attacks, 7.5% of the population in Manhattan met criteria for PTSD (Galea et al. 2002).

Trauma survivors are frequently described as being "in shock." Such individuals often appear numb and withdrawn. This can lead to the mistaken impression that they are not seriously affected by the experience and are not in need of help. Stupor, for example, involves a dulling of the senses and decreases in behavioral responsiveness and has been described in many survivors of automobile accidents (Noyes et al. 1977). In the immediate aftermath of the Buffalo Creek disaster, survivors reported "disorganization and sluggishness in thinking and decision making" (Titchener and Kapp 1976, p. 296). All of the correctional officers held hostage in the Hillman (1981) study reported feeling "dazed or in a 'state of shock'" (p. 1195).

Derealization symptoms (the world seeming unreal or dreamlike [American Psychiatric Association 2000]) were a common response to the Loma Prieta earthquake in California (e.g., 40% of the victims reported "unreal surroundings" (Cardena and D. Spiegel 1993), and some survivors of the Buffalo Creek disaster reported transient hallucinations and delusions (Titchener and Kapp 1976). Thirty percent of the accident/illness survivors in one study (Noyes and Kletti 1977) reported experiences that had a dreamlike quality. For example, one survivor recalled that at the time of an accident "my sight seemed filtered through a blue piece of tissue paper with spots of red and yellow" (Noyes and Slyman 1978, p. 379). Derealization experiences were also reported by several (3 of 14) soldiers ambushed in Namibia (Feinstein 1989) and by 54% of a group of airplane crash survivors (Sloan 1988).

Depersonalization (feeling detached from one's own body [American Psychiatric Association 2000]) was reported by 25% of the earthquake survivors in our study of the Loma Prieta earthquake (Cardena and D. Spiegel 1993). For example, one survivor of an accident reported that "it was as though I was separate from myself and watching, like in a dream when you are watching yourself" (Noyes and Kletti 1977, p. 404). Research on survivors of life-threatening events indicates that more than half have experienced feelings of unreality, automatic movements, lack of emotion, and the sense of being on "autopilot" (Madakasira and O'Brien 1987; Noyes et al. 1977; Sloan 1988). Often, there is an alternation between over- and undermodulation of response to traumatic stressors (Horowitz et al. 1991, 1993). For example, both depersonalization and hyperalertness are often prominent experiences during trauma (Noyes et al. 1977).

Numbing has long been found to be a strong predictor of the development of later PTSD—for example, among Israeli combat soldiers (Solomon et al. 1989) and in recent analysis of the Oklahoma City bombing data (North 1999, 2001). Similar results have been found among children, who are more prone to dissociation than adults (Lippmann and Steer 1996). Numbing, loss of interest, and an inability to feel deeply about anything were reported in approximately one-third of the survivors of the Hyatt Regency skywalk collapse (Wilkinson 1983) and in a similar proportion of survivors of the North Sea oil rig collapse (Holen 1993). One survivor of the Oakland-Berkeley firestorm whose house was in the path of the fire reported a strange sense of detachment:

It was as though I was watching myself on television. I had this image of myself talking to a policeman, asking if I could go to my home, and whether he had any information about where my son was. I thought that I seemed rather unemotional, and decided that I had better stay that way in order not to upset my wife. It felt like I was watching the experience rather than having it.

A subjective sense of numbing was suggested by the reports of 5 out of 14 soldiers involved in the Namibia ambush who were reported to have experienced constricted affect (Feinstein 1989). Correctional officers reported that when they were held hostage, with repeated beatings, the beating ceased to be painful (Hillman 1981). For example, one hostage said, "I could see my body moving so I knew that I had been kicked...but I didn't feel anything" (p. 1195).

Amnesia or memory impairment was reported by 29% of the Bay Area earthquake victims (Cardena and D. Spiegel 1993) and by 8 out of 14 of the soldiers directly involved in the Namibia ambush (Feinstein 1989). Impairment of memory or concentration was reported by 79% of airplane crash-landing survivors in one study (Sloan 1988). A boy who survived a lightning strike had total amnesia for the event (Dollinger 1985). Although the most common reported memory disturbance after trauma is intrusive recollection, 29% of those studied after the Oakland-Berkeley firestorm (Koopman et al. 1994, 1996) reported difficulties with everyday memory.

Dissociative symptoms have also been retrospectively reported to occur during combat. Veterans with PTSD have been found to obtain higher scores on measures of hypnotizability (D. Spiegel 1988a; D. Spiegel et al. 1982; Stutman and Bliss 1985). Bremner et al. (1992) administered the Dissociative Experiences Scale to 85 Vietnam veterans, 53 with PTSD and 32 with medical problems. The Dissociative Experiences Scale scores of those with PTSD were twice as high as those obtained among the comparison sample. Similarly, Marmar et al. (1994, 1998) found PTSD symptoms to be strongly correlated with their measure of peritraumatic dissociation.

Dissociative Symptoms Predict Posttraumatic Stress Disorder

Although dissociation may be a normal and even expected reaction during a traumatic event, it may become problematic if it persists after the trauma is over, potentially delaying or impeding a person's working through and putting into perspective the traumatic experience. Dissociation of emotions in response to trauma may impede cognitive and affective processing of traumatic experience, leading to increased vulnerability to PTSD (Foa and Hearst-Ikeda 1996). Dissociative symptoms, especially numbing, have been found to be rather strong predictors of later PTSD (Classen et al. 1998; Koopman et al. 1994; McFarlane 1986; Solomon et al. 1989). Shalev et al. (1996) found that peritraumatic dissociation predicted the development of PTSD, although in more recent work Shalev et al. (1997) finds that depressive symptoms overcome the shared variance with dissociation in predicting PTSD outcome. However, a number of recent studies have provided further evidence of the connections among trauma, dissociation, and PTSD.

Mayou et al. (2002) studied 546 patients who had been treated shortly after a motor vehicle accident. There was an 11% prevalence of PTSD at 3 years after the accident. Among the psychological variables that predicted PTSD at follow-up was dissociation during the accident.

Morgan et al. (2001) studied the nature and prevalence of dissociative symptoms in healthy subjects undergoing acute, uncontrollable stress during U.S. Army survival training. They found that 96% of subjects reported dissociative symptoms in response to acute stress in two studies. However, the number of dissociative symptoms was significantly lower among Special Forces soldiers who had received intensive training compared to general infantry troops.

Birmes (2001) studied 48 crime victims within 24 hours of the trauma, using the Peritraumatic Dissociative Experiences Questionnaire—Self-Report Version (Marmar et al. 1994, 1998). The victims were followed longitudinally to assess acute stress at 2 weeks after the assault using the Stanford Acute Stress Reaction Questionnaire (SAS-RQ) (Cardena et al. 1996, 2000) and posttraumatic stress at 5 weeks using the Clinician-Administered PTSD Scale (Blake et al. 1990) and the Impact of Event Scale (Horowitz et al. 1979). Those who developed PTSD had mean Peritraumatic Dissociative Experiences Questionnaire scores that were significantly higher (mean, 3; SD, 0.9) than those of victims without PTSD (mean, 2.3; SD, 0.7; t = 2.78; df, 46; P = 0.007). Similarly, the mean SASRQ scores were significantly higher among those who developed PTSD (mean, 97.9; SD, 29.2) than in those without PTSD (mean, 54.8; SD, 28.2; t = 4.9; df, 46; P = 0.00007). The SASRQ weighs dissociation items heavily (Cardena et al. 1996, 2000), as it was designed to measure ASD symptoms as defined in DSM-IV-TR (American Psychiatric Association 2000).

More extreme dissociative disorders, such as Dissociative Identity Disorder (DID), have been conceptualized as chronic PTSDs (Kluft 1985a; D. Spiegel 1984, 1986a, 1986b). Children exposed to multiple traumata are more likely to use dissociative mechanisms, including spontaneous trance episodes (Terr 1991), in part to accommodate what has been called "betrayal trauma" (Freyd 1999) when a child is abused by a caretaker. Such intimate and chronic mistreatment requires developing two radically different relationships to the same person, who both provides sustenance and inflicts harm. Thus, studies from a variety of settings, types of trauma, and ages of victims indicate that physical trauma seems to elicit dissociative responses. The effects and treatment of such extreme abuse survivors is discussed in the section Treatment Rationale.

Acute Stress Disorder

The prevalence and prognostic significance of dissociative and other symptoms in the immediate aftermath of trauma formed the empirical basis for including ASD as a new diagnosis in DSM-IV and DSM-IV-TR (American Psychiatric Association 1994, 2000; D. Spiegel and Cardena 1991). It is diagnosed when high levels of dissociative, anxiety, and other symptoms occur within 1 month of trauma and persist for at least 2 days, causing distress and dysfunction. Such individuals must have experienced or witnessed physical trauma and responded with intense fear, helplessness, or horror. This "A" criterion of the DSM-IV requirements for ASD is identical to that for PTSD. The individual must have at least three of the following five dissociative symptoms to be diagnosed with ASD: depersonalization,

derealization, amnesia, numbing, or stupor. In addition, the trauma victim must have one symptom from each of the three classic PTSD categories: intrusion of traumatic memories, including nightmares and flashbacks; avoidance; and anxiety or hyperarousal. If the symptoms persist beyond a month, the person receives another diagnosis based on symptom patterns. Likely diagnoses are dissociative stress disorder, anxiety disorder, or PTSD.

Trauma-Related Dissociative Amnesia

Dissociation involves a failure in the customary integration of identity, memory, and consciousness (American Psychiatric Association 2000). Although a certain degree of dissociation occurs in everyday life (H. Spiegel and Shainess 1963), pathological segregation of mental contents involves increased difficulty in retrieving episodic memories that should be available to consciousness (D. Spiegel et al. 1993a). Memory storage processes are clearly affected by dissociative phenomena, especially as the nature of memory storage and potential for retrievability are profoundly influenced by the associative matrix in which the memories are stored. Furthermore, many memories are stored and retrieved in a manner that is relatively devoid of the context in which they were learned-for example, implicit versus explicit (Schacter 1987, 1995), semantic versus episodic (Tulving and Schacter 1990), or procedural versus declarative (Squire and Cohen 1984; Squire and Zola-Morgan 1988) memories. Associative networks, the co-occurrence of related activated associations, are at the heart of connectionist models of memory (Rumelhart and McClelland 1986). It thus makes sense that mental processes that segregate one set of associations from another might well disrupt the associative networks and thereby impair memory storage or retrieval (Kihlstrom 1987; Kihlstrom and Hoyt 1990).

Functional disorders of memory have been traditionally conceptualized as deficits in memory retrieval (Evans and Kihlstrom 1973). Amnesia has been described as occurring when information that is potentially "available" is currently not "accessible" for recollection due to some kind of retrieval problem (Tulving 1983). However, some kinds of functional memory disorders may be related to organizational and storage deficits as well.

If a person is in an altered state of mind at the time of a traumatic experience (e.g., in a dissociated or hypnotic-like state), the way the memories are stored may be influenced by his or her narrowness of focus. The range of associations may be more limited, and therefore those that do exist are more intense and have an "on/off" quality consistent with the intrusion and avoidance that alternate in posttraumatic syndromes (Horowitz et al. 1993). Strong affect, for example, which is usually associated with traumatic memories, may influence both storage and retrieval (Cahill et al. 1994). There is evidence that mood congruence between the state in which memories were stored and that in which they are retrieved improves recall (Bower 1981). Similarly, another form of salient-state dependency involves dissociation itself. To the extent that individuals do enter a spontaneous dissociated state during trauma, the memories may be stored in a manner that reflects this state (e.g., with a narrower range of associations to context). There may be fewer cross-connections to memories that otherwise would be related (Evans and Kihlstrom 1973; Hilgard 1977). Furthermore, retrieval should be facilitated by being in a similar dissociated state (e.g., hypnosis) according to the principle of mental state congruence (Bower 1981). We have conceptualized trauma as a sudden discontinuity in experience. This may lead to a process of memory storage that is similarly discontinuous with the usual range of associated memories. This may explain the "off/on" quality of dissociative amnesia and its reversibility with techniques such as hypnosis (Lowenstein 1991; H. Spiegel and D. Spiegel 1978). Dissociated information is out of sight, but not out of mind. The information is kept out of consciousness but nonetheless has effects on it.

The idea of forgetting traumatic experiences seems to fly in the face of our ordinary notion that the more emotionally arousing an experience is, the less likely we are to forget it (Cahill et al. 1994; McNally 2003). However, such studies demonstrating enhanced recall with emotional arousal also show that blocking such arousal reduces memory as well (Cahill et al. 1994; D. Spiegel 2003b). That such amnesia for traumatic events does occur has been convincingly demonstrated. For example, Williams (1994, 1995) obtained hospital records of 129 women who were treated in a hospital emergency room for sexual or physical abuse and interviewed them 17 years later. The results of these interviews were striking: 38% of the women did not report the abuse that had been recorded in the medical record. Indeed, 12% reported no abuse at all. An additional 16% (10% of

the whole sample) of the women who did remember the abuse reported that there was a period in their lives when they could not remember it. In fact, if the analysis was conservatively restricted to only those with recorded medical evidence of genital trauma and whose accounts were rated as most credible (in the 1970s), 52% did not remember the sexual abuse. It should be noted that this lack of memory was not diagnosed as a dissociative disorder, but the interviews were not designed to establish the presence or absence of a psychiatric disorder. A particularly compelling case example of this phenomenon has been described by Corwin and Olafson (1997), who compared a videotape recorded shortly after a documented abuse episode with a tape recorded more than a decade later, when the subject was amnesic for events reported in the earlier tape.

The key elements of hypnosis-absorption, dissociation, and suggestibility (H. Spiegel et al. 2000)-are analogous to the three key elements of memory processing: encoding, storage, and retrieval (D. Spiegel 1998b). To the extent that the victim's attention is narrowly focused during trauma, information may be encoded in a rather limited form (e.g., the "weapon focus" of assault victims, who can provide elegant descriptions of the gun pointed at them but recall virtually nothing else about the assailant) (Loftus and Burns 1982). Dissociation can further isolate memories by separating them from common associative networks that would make associative retrieval easier. Indeed, amnesic barriers have been described as the common element linking formally induced hypnosis and dissociative processes (Hilgard 1977; Kihlstrom 1987; Kihlstrom and Hovt 1990). Furthermore, there is evidence that hypnotically induced amnesia for autobiographical information is quite similar to functional amnesia (Barnier 2002). However, some have questioned the connection between hypnosis and dissociation, citing the often negligible correlations between formally measured hypnotizability and dissociativity (Whalen and Nash 1996). However, there is an important distinction between normal and pathological dissociation (Barrett 1992). The former is usually a welcome experience associated with pleasant imagery and absorption, whereas the latter is unbidden and unwelcome. As Whalen and Nash (1996) note, the relationship between trauma, dissociation, and hypnotizability is strongest in clinical populations, as we and others have found (D. Spiegel 1988a; Stutman and Bliss 1985). Thus, the involuntariness of the clinically traumatic situation may mobilize strong hypnotic response in a formal measurement situation that is not necessarily aroused with less extreme

dissociative and hypnotic responses. Much has also been made of suggestion and expectancy in hypnotic and dissociative phenomena (Kirsch and Lynn 1998). Indeed, social context may contribute to the subjective experience of hypnotic phenomena, but it cannot account for variance associated with hypnotizability as a trait, which is robust (Hilgard 1965, 1970; Piccione et al. 1989). Suggestion can also influence recall (Loftus and Hoffman 1989), although the strength of this effect has been exaggerated (D. Spiegel 1997, 2003b). There is also little evidence to support the hypothesis that suggestion can produce a full-blown dissociative disorder (Brown et al. 2000). Thus, hypnotic and dissociative phenomena are clearly key elements in the response to traumatic experience and the nature of acute and posttraumatic stress symptoms. They are therefore crucial components of the psychotherapy of traumatic reactions.

Treatment Principles

The intense concentration mobilized in the hypnotic state may serve to reverse the dissociative fragmentation of mind elicited by trauma (Maldonado and D. Spiegel 1998). Teaching patients that they can access and retrieve traumatic memories and work through and assimilate them from a new point of view can provide a sense of control over the memories. This knowledge also provides patients with a therapeutic method for managing the memories, which makes the memories seem less overwhelming and intrusive.

The controlled experience of the hypnotic abreaction itself provides boundaries around the psychotherapeutic process of grief work (Lindemann 1944 [1994]; D. Spiegel 1981). Instead of telling patients not to ruminate over the details of a traumatic experience, the therapist does the opposite. He or she instructs the patient how to think about the experience. The inferred message is that once this piece of therapeutic work has been accomplished, the patient can go on to work on other things. Patients are slowly separated from the role of victim as they see themselves from a different perspective. The ultimate goal is to help patients cognitively and emotionally restructure traumatic memories in such a way that they bear the impact of them yet move beyond to see the information from a different point of view, thereby restructuring traumatic memories (H. Spiegel and D. Spiegel 1987). The patient can be taught that the intrusive memories and other bodily symptoms commonly present in PTSD are a means of reexperiencing painful memories. If the patient then is able to find a controlled method (i.e., self-hypnosis) to access and work through the memories, the frequency of their spontaneous intrusion often decreases (D. Spiegel 1998a, 1998b). Working through the memories involves expression of painful emotions coupled with learning to see the traumatic event from a new point of view (e.g., acknowledging what he or she did during the traumatic event that was either selfprotective or helped others). By coupling awareness of traumatic memories with a cognitively restructured recognition of how he or she can adapt and respond, the patient makes the memories more bearable (Foa and Hearst-Ikeda 1996; Foa et al. 1999). This approach has common elements with other cognitive and behavioral treatments for PTSD (Foa and Meadows 1997), including exposure to traumatic memories and both cognitive and emotional processing of them. Although there have been very few systematic studies of the utility of hypnosis in the treatment of posttraumatic stress symptoms, there is some evidence that it is at least as effective as other cognitivebehavioral treatments (Brom et al. 1989; Foa et al. 1999).

One use of hypnosis as an adjuvant to psychotherapy can be summarized in eight Cs (principles) of treating PTSD with hypnosis (D. Spiegel 1996):

- 1. Confront the trauma. Take a careful history and determine the extent of exposure to traumatic experiences that may be important factors in the development of the symptoms for which the patient is seeking help. Many patients either desire to (Koutstaal and Schacter 1997) or are told to forget or ignore the traumatic experience ("just put it behind you"), in part because revisiting the trauma and its impact is upsetting to others in close contact with the victim. Admitting and facing the extent of trauma-induced damage also involve acknowledging the damage and how much the traumatic event adversely affected the patient's life. Thus, an individual's reluctance to confront traumatic memories may be combined with that of family, friends, and health care professionals.
- 2. Condensation of the traumatic experience. In working through traumatic memories, it is not necessary to review every painful detail of the experience. Rather, it is useful to find out which aspects of the trauma were the critical elements that make it upsetting to the patient. This can be achieved by identifying a particularly frightening memory as the trauma is being recalled that summarizes

or condenses the essence of the experience. It often helps to ask the patient, "What was the worst part of it for you?"

- 3. Confession of feelings and/or experiences of which the patient is often profoundly ashamed. Trauma tends to induce shame for having been in a situation that involved feeling helpless, degraded, frightened, or in other ways profoundly different from the ways in which we customarily like to see ourselves and be seen by others. Often, the feelings go beyond "survivor guilt" to a more generalized sense of having what the sociologist Erving Goffman (2001) called a "spoiled identity." Many individuals feel deeply ashamed of what happened to them and may not have discussed aspects of the experience with anyone before.
- 4. Consolation. It is extremely important that the therapist be emotionally available to patients and provide consolation in a professionally appropriate manner. The presence and strength of transference during the psychotherapy of trauma victims are considerable. The use of hypnosis does not prevent development of a transference reaction; it actually may facilitate its emergence earlier than in regular therapy due to the intensity with which the material is expressed and memories are explored. The kind of transference elicited during the psychotherapy of trauma victims is different in the sense that the feelings transferred are not so much related to early object relationships but are instead related to the abuser or circumstances that are associated with the trauma (D. Spiegel and Maldonado 1999). One can think of this as a "traumatic transference," in which patients experience in the relationship with the therapist feelings they have about the traumatizer or traumatic event. Thus, these reactions are useful "grist for the mill" and bear discussing with patients. In particular, exploring with patients the extent to which they feel that the psychotherapy is useful or harmful to them is important. This expression of concern on the part of the therapist can help to differentiate the therapy from the trauma.
- 5. Conscious awareness of previously repressed memories is a major goal. The fundamental idea is that although traumatic memories that are partially or completely out of consciousness may exert an influence on conscious mental processing, it is difficult to work them through or restructure their meaning outside of conscious awareness. Bringing traumatic memories into consciousness provides the patient the opportunity to acknowledge, bear, and put them into perspective. The use of hypnosis to help patients focus on recall of traumatic memories, either through the use of the

screen technique or hypnotic age regression, is a helpful tool in bringing such memories into consciousness. The split-screen technique is described in Chapter 13, Anxiety, Concentration, and Insomnia and in this chapter in the section The Split-Screen Technique.

- 6. Concentration on the desired goal, under the guidance of the therapist using hypnosis, allows the patient to turn to traumatic memories during the psychotherapeutic session in a manner that isolates the memories from broader associations and implications. This can make the memories more manageable, limiting the flood of feelings of fear, loss, and anger that may well be associated with the total context of the traumatic experience. Such highly focused attention also helps patients to shut traumatic memories off once the therapeutic work has been completed. A common fear of trauma patients is that if they allow themselves to remember, the memories will take over and they will be rendered defenseless once more-the "Pandora's box" syndrome. Using the structured experience of the hypnotic trance, patients learn that they can think about the traumatic experience in a constructive and controlled fashion rather than trying not to think about it. The implied message is that once the therapeutic process is over, the patient will then be freer to attend to other things.
- 7. Control must be returned to the patient. The core conflict in trauma experience lies in the sense of helplessness and loss of physical and emotional control. It is therefore critical that the therapist guide the psychotherapy in such a way that it enhances patients' sense of control over their memories. Because all hypnosis is self-hypnosis, it becomes a useful tool for patients to use to master past experiences, as well as current symptoms (e.g., flashbacks, anxiety, nightmares). The therapist can reinforce that sense of self-control by teaching patients how to work through traumatic memories and helping them to do so. The therapist should reinforce the notion that hypnosis is a collaborative enterprise, not something done to the patient by the therapist, and that hypnosis is also a self-hypnotic tool available to patients at any time to enable them to help themselves better cope with the aftermath of trauma.
- 8. Congruence among the content and feelings associated with the trauma and the patient's ongoing feelings and views of self is the ultimate goal of therapy. Integration of traumatic memories accompanied by manageable affect and a revised view of self should make the memories tolerable and reduce symptoms. The memory of the trauma is felt to be compatible with a revised view of the patient's self rather than an unbearable aspect of his or her life.

Use of Hypnosis in Working Through Traumatic Memories

A number of hypnotic techniques can facilitate the process of recovery of traumatic memories while still allowing patients to feel in control. Many patients fear that if they allow traumatic memories to surface they will, once again, lose control, symbolically reenacting the helplessness experienced during the traumatic episode. To some extent this is not an unreasonable fear. Many patients do indeed experience their memories as taking over their mental life every time they experience a flashback in a way that is analogous to the feeling that they were physically taken over by the trauma itself. Therefore, one of the advantages of using hypnosis is that it allows patients to be able to separate their bodies from their memories. Part of the therapist's role is to help patients control and structure the retrieval and expression of painful memories and feelings associated with them. A number of hypnotic techniques can be used to facilitate this controlled recovery. These include relaxation techniques, projective techniques, age regression, and the affect bridge.

Physical Relaxation

After inducing a state of self-hypnosis, a level of physical relaxation may be achieved by instructing patients to imagine themselves in a place that they associate with feelings of relaxation and calmness. This could be a place they have been before or a place they construct in their mind. In some patients, a greater level of physical relaxation can be achieved by having them imagine they are floating in a bath, hot tub, or lake, or just floating in space. Once the desired level of relaxation is achieved, patients are instructed to maintain this state while they are asked to confront emotionally charged traumatic memories. The objective is to process traumatic memories, within the context of therapy, at a pace that can be tolerated while maintaining the same level of physical, and, if possible, emotional relaxation. This approach takes advantage of the natural dissociation that is a component of hypnosis to separate psychological from physical arousal.

The Split-Screen Technique

The second hypnosis method, the split-screen technique, involves the use of projective techniques. It implies that patients will "project" images, sensations, and thoughts away from themselves onto an imaginary screen. Depending on the patient's preference, this could be a movie screen, a television screen, a computer screen, the surface of a calm lake, or a piece of clear blue sky. This technique facilitates the process of separating memories from physically painful sensations to minimize traumatic abreaction or retraumatization.

The screen allows for the manipulation of the affect that invariably is mobilized during the retrieval of traumatic memories. Patients are taught that they can control the intensity of the content by making the images larger or smaller or moving the screen closer or farther away from them. Patients can further manipulate the images by changing the color (e.g., making images black and white rather than color), the sounds (e.g., lowering the volume or completely eliminating the sound), or the speed (e.g., by slowing or fastforwarding images), or they can choose to turn the screen off if the memories become uncontrollable at any given time. Patients are reminded that, as in a frightening movie, some scenes are difficult or even repulsive but that they do not have to reexperience the physical distress associated with the traumatic memories or images. This technique allows patients to have an enhanced sense of control and a feeling of safety.

A variation of the screen technique calls for patients to divide the screen in half. While doing so, patients are then asked to project on the left (sinister) side of the screen images of what they need to work on (e.g., memories of the trauma). On the right, they picture something they did to protect themselves or someone else or to be creative. On occasion, some patients may have difficulty remembering anything good about themselves or what they did. Some may even blame themselves for not having done enough to prevent the traumatic event or for having gotten into a situation that was not, in fact, foreseeable. The therapist encourages the patient to recall anything he might have done to protect himself and restructure his perception of powerlessness into recognition of what he did that may have contributed to his survival. Fighting back, screaming for help, or just lying still to avoid further abuse are some examples of common defensive acts. The idea at this stage is to facilitate traumatic memories to make them more bearable as patients see that part of themselves

attempted to provide protection, maintain dignity, or protect others, as illustrated in the following case example.

A young woman presented for help with hypnosis in better visualizing the face of an assailant who had attacked her as she returned at dusk from the grocery store. He was attempting to drag her into her apartment. She fought him off, and the police showed little interest in pursuing him because the sexual assault had not been completed. After they left, she had a generalized seizure, and it turned out she had a basilar skull fracture. She was highly hypnotizable, and during the hypnotic visualization of the assault, she realized something that had not been clear to her before: "From the look on his face I can see he doesn't just want to rape me, he wants to kill me. If he gets me into my apartment he will kill me." She focused on this realization and the image of his hatred and threat to her. She was taught the split-screen technique and asked to place this image on the left side of the screen and picture on the right side something she did to protect herself. She said, "He is surprised that I am fighting him so hard. He doesn't expect me to put up such a fight." She emerged from the hypnosis with the restructured understanding that although she had been in more danger than she realized, she had probably saved her life. Thus, despite the disappointment of having no clearer idea of what he looked like (it was getting quite dark when he attacked her), she had a different perspective about what had happened. Before this session, she had been feeling guilty that she had been so seriously injured. After the session, she could better tolerate the memory of the attack because it was coupled with her recognition that she had acted in such a way that she saved her own life.

In the split-screen technique, the two images serve to restructure the memory of the trauma. The screen on the left symbolizes the summary or condensation of the trauma. The screen on the right helps patients to realize that they can be creative, and although they were indeed victimized, they were also attempting to master the situation and displayed courage during a time of overwhelming terror and pain. This process also allows them to realize that the humiliation of the trauma is only one aspect of the experience.
Age Regression

A third hypnotic technique involves the use of age regression. Different from projective techniques, it may not provide patients with the protective advantage of being able to "project" memories away from themselves. Therefore, age regression may prove to be a more intense experience. It is very useful in helping patients understand the origin of long forgotten bodily symptoms, such as conversion symptoms and somatic flashbacks. Age regression may even help patients recall dissociated memories. In summary, highly hypnotizable individuals are able to use this technique as a form of "role-playing" events, as if "they are happening all over again." This allows for the associated affects to surface, which in turn may facilitate the recovery of yet more repressed memories. It may even help explain some present behaviors, such as a patient's disproportionate reactions to seemingly benign stressors, as in the following case example.

A Vietnam combat veteran was unable to explain his sudden decline from 15 years of good to excellent service ratings to being mustered out of the Army with a general discharge and transfer to a series of Veterans Administration and state psychiatric hospitals. He had been serving in combat in Vietnam for a number of years and spoke Vietnamese. During his time in Vietnam, he had informally adopted a Vietnamese orphan boy, and the boy had been killed during the Tet Offensive. He had been diagnosed as having schizophrenia and sociopathology and was found to be a drug abuser because of occasional hallucinogen use after discharge. He spent a year in a state hospital for the criminally insane after he struck a district attorney in open court when the prosecutor accused him of lying about having had combat experience. The patients in the state hospital immediately concluded that he was not "one of them," and assuming he was an undercover narcotics agent, threatened to murder him. He was kept in solitary confinement for his own protection. A social worker took a careful history and suggested that his downturn occurred right after the death of the orphan child, but nothing further was done with this information.

He was admitted to the Palo Alto Veterans Administration Medical Center shortly after attempting to drive his car off of a cliff into the Pacific Ocean. He was depressed and suicidal but unclear about what had led to his current condition. He was found to be highly hypnotizable on the Hypnotic Induction Profile (HIP) (4 intact, induction score of 10), and age regression was used. He was told while in trance that we would change times, and after we did, when I (D.S.) stroked the side of his eves he would open them and speak to me as though it were the time we had agreed on. Later, he was told, when I stroked his forehead, his eves would close and we would change times again. We first went back to reliving his arrival in Vietnam, when he said, "Caskets-look at all them caskets they're putting on the Charlie 141-the same one we just got off of." He then remembered noticing the children: "Look at all them kids with the stuck out stomachs. You see them? They ain't got nothing to eat." Time was then changed to the period of the boy's death. He relived, with considerable affect, a rocket attack in which the hospital where he worked was overrun and then finding the body of the boy he had adopted. He said, "They ain't gotta kill kids. They should got me instead of Chitown [the boy's name]." He then relived running off into the jungle attacking Vietcong in revenge for the boy's death. We shifted time to his burial of the boy. He held out his hand in front of his chest and acted out dropping dirt on the casket, saying, "Ashes to ashes and dust to dust, I guess...Chitown, Chitown, if I'd just taken you over to the hooch you wouldn't be there, man. It's all my fault. It's all my fault. If I'd just taken you over to the hooch." I asked him what Chitown would have said to him, and he replied, in the boy's voice, "We was just laughing. You number one Sargie, number one." I then had him shift times again to an event when they were both happy. "He could hop on his little crutch. It's your birthday. Chitown. I got a surprise for you from my sister in Chicago. It's an electric train. You never seen that before. And Chitown loves ice cream, man." I then asked him to picture a split screen, with an image of Chitown's death on one side, and the birthday party on the other. He emerged from this 40-minute hypnotic regression picturing only "a grave and a cake."

He spent time grieving the boy's death and gradually emerged from his suicidal depression and PTSD symptoms, also with the help of a tricyclic antidepressant. He had a relapse 6 months later when in the space of 2 weeks one of his brothers, a policeman, was killed in the line of duty; his wife started seeing another man; and someone shot his dog. He recovered after a brief hospitalization. He now feels

he has worked through his feelings about the loss of the child, and although he has had occasional periods of depression, he is doing well, cycling and fixing bicycles for children. This case is discussed in further detail elsewhere (D. Spiegel 1981).

Affect Bridge

A fourth hypnosis technique is the "affect bridge" (Watkins 1987). This technique is particularly useful in cases in which patients present with phobia-like symptoms. In using the affect bridge technique, a hypnotic trance is produced. Then, after achieving a state of physical and emotional relaxation, patients are instructed to "go back to the very first time you felt this way before." Usually, highly hypnotizable individuals respond by recounting a past experience associated (literally or figuratively) with the current fearful feelings. This then allows the therapist to help the patient figure out associations or explanations for current inappropriate responses, such as phobias.

Restructuring Trauma

All of the preceding hypnosis approaches are designed to help the patient see the traumatic event from a new perspective, recognizing and accepting the helplessness imposed on them by the traumatic event, while at the same time crediting their efforts to protect themselves or somebody else during the trauma. This can be conceptualized as a process of "grief work" as patients acknowledge, bear, and put into perspective the loss of a sense of invulnerability, of health, or of loved ones (Lindemann 1944 [1994]; D. Spiegel 1981). In his classic study of survivors of the Coconut Grove nightclub fire, Lindemann noted that a period of acute distress and restlessness was followed by grieving the losses: The ability to cathect new relationships and aspects of life was preceded by mourning elements of the old life destroyed by the fire. He further noted that a group of individuals who initially appeared unfazed by the tragic events had very poor long-term outcomes. A number were hospitalized and suicidal a year later. Thus, there is a normal processing of traumatic experience that involves coming to terms with acute losses in trauma and that can be facilitated by psychotherapy.

Furthermore, many trauma victims would rather feel guilty than helpless. They would rather blame themselves inappropriately for events

over which they had no control than accept their helplessness. They misuse hindsight about the trauma to assume that the events were surely predictable and therefore avoidable. They imagine that they could simply replay the events and change the outcome. Such an approach to the trauma can be profoundly demoralizing, leaving the victims burdened by needless guilt and shame. Helping them face and bear the feelings associated with traumatic events can ultimately free them from their unconscious efforts to "undo" the trauma and accept what happened.

This acceptance and restructuring of the traumatic event can also help patients to recognize and give themselves credit for what they did to survive. This way of approaching their traumatic past allows them to change their self-image from that of a victim to that of a survivor. Patients also learn that they are able to use self-hypnosis to access the memories, thus controlling the way past events affect their present.

Outcome

There are numerous clinical reports of the effectiveness of hypnosis as an adjunct to treatment of PTSD (Brende and Benedict 1980; Kardiner and H. Spiegel 1947; Putnam 1992; D. Spiegel 1981; van der Hart et al. 1990). One controlled study of 112 subjects with PTSD demonstrated that psychotherapy with hypnosis was superior to a nontreatment control condition, was equivalent to both psychodynamic therapy and systematic desensitization, and was especially effective in reducing intrusion symptoms (Brom et al. 1989). The literature, limited as it is, provides evidence that hypnosis is a promising treatment for traumatic stress-related syndromes (Cardena 2000). The shift in concentration elicited in hypnosis, so useful in defending against the immediate impact of trauma while it is occurring and so problematic in the aftermath of trauma in that it may hamper or delay working through traumatic memories, can be quite useful in mobilizing and putting into perspective traumatic memories and reducing the symptoms of ASD and PTSD.

Dissociative Disorders

Trauma can elicit dissociation, complicating, delaying, or preventing the necessary working through of traumatic memories by patients. The

nature of the acute response may influence long-term adjustment. Although dissociating during acute trauma may well be an adaptive and useful means of putting aside threat cues so that the person can respond adaptively, persistent dissociation may make it too easy to avoid working through the traumatic experiences later. This can lead to chronic dissociation (Kluft 1985a, 1985b, 1985c; D. Spiegel 1984). Indeed, dissociative disorders can be understood as chronic and severe PTSDs (D. Spiegel and Cardena 1991), as many individuals with dissociative disorders may have histories of severe and chronic sexual and physical abuse (Chu and Dill 1990; Chu et al. 1999; Kluft 1985a; D. Spiegel 1986a, 1986b). Thus, treatment of patients with dissociative disorders includes elements of the hypnotic treatment of acute trauma.

Dissociative disorders involve a failure of the customary integration of identity, memory, or consciousness (American Psychiatric Association 2000). As dissociation is one of the three main components of hypnosis, it makes sense that hypnosis might be useful in identifying and controlling dissociative symptoms. Dissociation of identity (DID), of memory (dissociative amnesia and fugue), or of consciousness (depersonalization disorder: dissociative trance disorder) can result in an array of symptoms that affect intrapsychic and interpersonal functioning. Not being able to recall parts of experience to consciousness can intensify many preexisting problems. Indeed, there is evidence from experimental studies with hypnosis that a patient's lack of awareness of an instructed increase in arousal intensifies the physiological consequences of arousal. Hypnosis can be helpful in clarifying the diagnosis as well as facilitating psychotherapy in dissociative disorders (Kluft 1982; D. Spiegel 1987). For example, the induction of hypnosis may elicit dissociative phenomena. Patients with pseudoseizures or DID may spontaneously produce the conversion symptom or switch identities during or after hypnotic induction. This may derive from statedependent associations between the dissociative symptom and the hypnotic state (cf. Bower 1981). Although symptom activation is often viewed as a worrisome side effect of hypnotic techniques, it actually provides an opportunity to explain to the patient the nature of the symptoms and provides a means of accessing and controlling them.

Treatment Rationale

The ability to achieve a controlled mobilization of patients' dissociative mechanisms and the resemblance between some of the symptoms experienced by trauma victims and hypnotic-like states make the use of hypnosis especially relevant in the treatment of dissociative disorders. A traumatic experience may trigger sudden discontinuity of physical and mental contents. This spontaneous dissociation is intended to buffer the immediate impact of the trauma so a person can maintain psychological control during times of enormous physical and emotional stress. Unfortunately, a number of trauma victims go on to experience acute or chronic symptoms, such as intrusive thoughts, anxiety, hyperarousal states (e.g., posttraumatic phenomena), and dissociation. These amount to trancelike defenses. If an uncontrolled use of a patient's hypnotic capacity is the source of his or her symptoms (e.g., flashbacks, alter personalities), appropriate use of hypnosis in the present can become a tool to access previously dissociated material during the course of therapy.

As we have previously discussed, many trauma victims respond to the traumatic event by using dissociative-like defenses during or after the trauma. In instances of repeated trauma, it is likely that victims "learn" how to trigger these dissociative responses (selfhypnosis) to avoid further trauma or better tolerate it. If hypnoticlike states are spontaneously elicited during traumatic experiences, it makes sense that the very entry into this same state will lead to the retrieval of memories and affects associated with the original trauma as predicted by the theory of state-dependent memory (Bower 1981). The transition from normal consciousness into a hypnotic trance can facilitate access to memories related to a dissociated state, similar to what might have happened at the time of the original trauma.

Any psychotherapeutic treatment of posttraumatic and dissociative disorders must focus on helping victims acknowledge and bear the extent of the psychic damage caused by the trauma. This is then followed by helping patients develop more mature and adequate coping mechanisms that will assist them in putting their traumatic memories into perspective. A comprehensive treatment approach, including cognitive restructuring, allows patients to adapt to a new life incorporating memories of the traumatic experience worked through in a manner that interferes as little as possible with their daily living activities.

Trauma victims may forget or dissociate memories related to the trauma because reality is too painful to be faced, especially when they are forced to live in a home where they are abused by the same people on whom they depend for sustenance and support, a situation that has been aptly described as "betrayal trauma" (Atlas and Ingram 1998; Freyd 1999). Such abuse victims need to maintain more than one unreconcilable relationship to the same person, being at once fearful and dependent, avoiding harm and hoping for love. Furthermore, forgetting the trauma is encouraged by the fact that often the abuser warns that "terrible things will happen if you speak about this." The options are to risk causing damage or to "forget" that anything happened. But there is no perfect defense. Many memories are stored at a conscious and/or unconscious level. Some patients always remember. Some remember only parts. In yet other cases, memories are transformed and interspersed with fantasy (e.g., some cases of ritual abuse or alien abduction). If a number of terrible things could happen, even the improbable becomes conceivable.

The feelings of fear and shame associated with the amnestic events slowly leak into the conscious mind; the memories are out of sight but not out of mind. As many of the memories are not available, it is difficult for patients to make sense of them. This creates anxiety and depression and impairs corrective understanding and action. Many victims experience some of the leaked memories in the form of flashbacks or dreams. Many trauma victims isolate themselves because of the shame they feel in relation to the suspected trauma. Children especially do not understand independent causation and are inclined to blame themselves for whatever happens to them. Victims of traumatic events often see themselves the same way they see the object that the trauma temporarily made them into. They make sense of their world by beginning to believe that their abuse was deserved. This gives them a fantasy of control: If they simply behaved better, the abuse might not occur.

Many victims of trauma fear that if they allow traumatic memories to surface they will once again lose control. In essence, this is what happens every time they experience a flashback. Trauma victims have a difficult time separating themselves and their surroundings from their memories. At the time of a flashback and during episodes of dissociation, many of our patients see themselves as they were at the time of the trauma. They believe they are as defenseless and vulnerable as when the trauma occurred, victimized now by their internalized memories rather than by those who abused them.

USING HYPNOSIS

Clarifying the Diagnosis

Hypnotizability testing is a crucial means of clarifying the differential diagnosis. Patients with a dissociative disorder should be highly hypnotizable (Frischholz et al. 1992). Indeed, a common differential diagnosis involves DID versus schizophrenia. In a formal sense, DID patients have a "delusion" that their body is occupied by a number of "people." They often have auditory hallucinations—the "voice" of alter personality states. The affect may become flat in patients who are being treated with neuroleptics. Frischholz et al. showed that HIP scores are extremely divergent between patients with DID versus schizophrenia. Indeed, division of HIP scores at the median, with assignment of all highs to a diagnosis of dissociative disorder and all lows to schizophrenia in this comparison would correctly classify 93% of the patients.

One of us (D.S.) was asked to examine a woman for a possible DID diagnosis. She had stopped a flight taking off from San Francisco with a wild outburst, and the plane returned to the gate to discharge her. She reported sudden changes in mood and gaps in memory and claimed she had DID. However, her score on the HIP was a 3 decrement, with an induction score of 3. I told her that whatever she had, it was not DID and that if she disrupted another flight, she would likely wind up in jail. She returned 2 years later for another evaluation for purposes of disability and then disclosed that she had withheld some information from me years earlier: She was a cocaine abuser. Thus, the HIP was extremely helpful in clarifying the differential diagnosis and making it clear that her pattern of symptoms was inconsistent with a dissociative disorder, even though crucial clinical information was being withheld.

Teaching the Patient About the Disorder

The patient's performance on the HIP can be discussed and used to explain to the patient the nature of dissociative disorder. Many such patients spontaneously dissociate during the hypnotic induction. Their illness can be explained as a kind of uncontrolled hypnotic state in which they shift from one component of their store of memories and experienced identities to others. Then they can learn to use a formal state of self-hypnosis to "access" these different components through the following instructions.

Go into a state of self-hypnosis as we have done before together: on one, do one thing, look up. On two, do two things, slowly close your eyes and take a deep breath. On three, do three things, let the breath out, let your eyes relax but keep them closed, and let your body float. Then let one hand or the other float up in the air like a balloon.

Find a safe place—a garden, a room in your house, somewhere in the outdoors—and imagine yourself there. Invite the other parts of your personality to gather there so you can talk to them. Now let them speak with me.

When this exercise is completed, provide a formal ending to the hypnotic state: On three, get ready, on two, with your eyelids closed, roll up your eyes, and on one, open, let your hand float back down, make a fist, open, and that is the end of the exercise.

After completion, discuss the hypnosis experience with the patient.

Alternatively, if such access to memories and identities is not available, you may use formal hypnotic age regression to have the patient relive a previous time when another "alter" was "out," as in the following instructions.

We are now changing times, going back to an earlier period in your life. Let's go back to last week when the "Susan" part of you was out. Later, when I ask you to close your eyes, we will change times again. Now the days are falling away; it is no longer Wednesday, Tuesday, Monday—it is now Friday, and Susan is out.

Talk then with this alter identity, making it clear that you "favor" no one particular component of the patient's personality structure. After the discussion, use the formal hypnotic state to end the age regression.

Close your eyes. We are now adding time, coming back through Saturday and Sunday to Wednesday [give the date]. On three, get ready; on two, with your eyelids closed, roll up your eyes; and on one, open, let your hand float back down, make a fist, open, and that is the end of the exercise.

These exercises help patients understand more about their dissociative disorder and teach them control over the dissociation, while allowing the therapist to obtain a clearer picture of their personality structure. These fragments can best be understood as poorly integrated components of their personality. It is not so much that such patients have more than one personality but, rather, less than one personality.

The goal is integration of these different identities and personality states, and working through traumatic memories is one important component of achieving integration. The therapist's task is to help patients retrieve the painful memories, express them in ways that do not foster self-destructive behaviors (e.g., self-mutilation, high-risk behaviors), encourage the development of mature defenses, and restructure the ways patients think about themselves, while allowing them to develop improved self-esteem and self-image.

Working Through Traumatic Memories

Many traumatic memories may be elicited during the course of psychotherapy without requiring methods of memory enhancement. Nevertheless, the use of hypnosis can facilitate access to repressed memories that have not emerged using other techniques. This is true not only of painful, repressed memories but of situations when both the patient and the therapist have worked on resistance issues and feel that some additional leverage is necessary (Maldonado and D. Spiegel 1995).

Eliciting historical material is important in working through past trauma. In this sense, the psychotherapy of authentic DID is like treatment of chronic PTSD. The process of integration is facilitated by working with spontaneously occurring alternate personalities and helping the patient acknowledge, bear, and work through traumatic memories. The sense of shame and inappropriate guilt that is attached to the traumatic memories makes the traumatized alter personality feel unacceptable to herself, to other alters (who often share the opinion), and to other people, the therapist included. Acceptance of the alter with her traumatic memories can facilitate fusion. However, the unearthing of memories is not an end in itself. It should not be conveyed to the patient that integration cannot occur without an extensive review of the past. Gathering historical material provides guidelines for understanding the personality organization (or disorganization) of the patient, but fascination with the details of the past should not supplant the steady process of support toward integration.

Too much attention to patients' historical past can reinforce their hysterical present. A sign of progress in the therapy is a shift in its focus from preoccupation with the past to an enthusiastic interest in improving the present and future. Gradually, the patient's attention shifts from why he is the way he is to what to do to improve the situation.

Breuer and Freud (1893–1895) first described the usefulness of hypnosis in the treatment of trauma-related disorders. They described how abreactions were accompanied by the release of psychic tension and, on occasion, relief of physical symptoms. This was the precursor of the cathartic method. The belief was that some intense affect associated with the traumatic event needed to be released. Therefore, facilitating recall of the event, along with its associated emotion, during a trance state would result in symptom resolution.

The idea that recollection alone (i.e., catharsis) would cause a cure did not last long. Soon afterward, Freud realized that conscious cognitive work needed to be done on the recovered material for it to be successfully worked through (Freud 1914). For psychotherapy to be effective, patients must experience an enhanced sense of control over the memories being abreacted. In fact, every time patients go through a flashback they experience an uncontrolled abreaction. Therefore, there is a risk of further retraumatization in the continuous reliving of traumatic experience without adequate restructuring before new defenses are in place (Kluft 1992, 1993; Maldonado and D. Spiegel 1995; H. Spiegel and D. Spiegel 1987).

What makes hypnosis one of the most helpful tools in the treatment of patients who have dissociative disorders is its ability to be used both as a diagnostic tool and a powerful therapeutic technique (Putnam 1992). Victims of traumatic events experience their symptoms (e.g., fugue states, dissociated identities, amnestic episodes, flashbacks) as occurring unexpectedly and beyond their control. In contrast, the hypnotic state can be seen as a controlled form of dissociation (Nemiah 1985; Rogers 1951). The use of hypnosis facilitates the recovery of memories while allowing for some of them to remain dissociated from cognition until the time when the patient is ready to deal with them. Finally, hypnosis also allows for the recovery and reprocessing of recovered memories at a pace the patient can tolerate.

When hypnosis is used correctly, a therapist demonstrates to patients the amount of control they have over these states of mind that they experience as automatic, uncontrollable, and unpredictable. The purpose is to teach patients that they can control their episodes of dissociation and allow the development of improved patterns of communication that will lead to a reduction in spontaneous dissociative symptoms. The goal is for trauma victims to recognize their dissociative states and learn how to master their capacity to control them.

The use of hypnosis during the treatment of trauma victims and patients who have dissociative disorders has as its primary objective an assessment of the memories, cognitive restructuring of patients' self-image, and a working through that may be similar to grief work. As mentioned before, hypnosis is just another tool therapists can use to facilitate trauma work. The art of hypnosis work does not lie in the induction process but rather on what happens after trance is induced. In other words, what really counts is not how to get there, but what happens once you are there. Remember that all hypnosis is really self-hypnosis; therefore, therapists are only tapping into their patients' natural ability to enter trance state. What patients need then is guidance and sometimes "permission" to use it appropriately.

The initial phase of therapy involves memory retrieval or recovery. Therapists using hypnosis during this phase need to remember two things. The first is that these patients are highly suggestible and easily subject to memory contamination. The second is that patients need help achieving a controlled abreaction. The purpose of hypnotic retrieval is not limited to helping patients remember the trauma. Every flashback, every traumatic nightmare, even every unstructured hypnotic retrieval could represent an uncontrolled abreaction. Each of these exposes patients to further retraumatization. Therefore, adequate hypnotic retrieval involves the use of techniques that promote physical levels of relaxation and a sense of mental and emotional control. Recovery of traumatic memories should proceed at a pace patients can tolerate. Because of this and because of the need for patients to regain control over their physical and mental life, the hypnotic technique should be tailored to the patient's particular needs, with a special emphasis on using the occasion to enhance patients' sense of control over their mental state and the working through of traumatic memories.

After inducing a trance state, a level of physical relaxation may easily be achieved by instructing patients to imagine themselves in a place that they associate with feelings of relaxation and calmness. This could be a place they have been before or a place they construct in their mind. In some patients, a greater level of physical relaxation

can be achieved by having them imagine they are floating in a hot tub or pool or in space. Once the desired level of relaxation is achieved, patients are instructed to maintain this state while they are asked to confront emotionally charged traumatic memories. The objective is to process, within the context of therapy, traumatic memories at a pace that can be tolerated while maintaining the same level of physical and, if possible, emotional relaxation, as described in the section on PTSD.

A 28-year-old woman with DID who had two primary identity states, one passive and confused by the often angry reaction of others to her and another angry and critical of the other "alter," presented for help to one of us (D.S.). After initial work in therapy to identify her dissociative disorder, which uncovered memories of self-inflicted stab wounds that the passive alter personality could not explain, and setting limits on self-mutilative behavior while attempting to acknowledge the value of caring for others and potential for healthy assertiveness represented by the two components of her personality structure, we began to examine her history of sexual abuse. Her stepfather, who abused drugs, sexually assaulted her when she entered her adolescence. Using hypnosis and the split-screen technique, she recalled one episode when he became high on marijuana and forced her (at age 12) to perform oral sex on him. She relived her disgust at what he was forcing her to do on the left side of an imaginary screen, and then suddenly laughed, saying, "I threw up all over him. He slammed me against a wall, but I spoiled his fun." I had her picture her having spoiled his fun on the right side of the screen. The restructuring involved having her acknowledge that she had the ability to disrupt his abuse of her despite her extreme discomfort and fear.

Traumatic Transference

The relationship with the therapist during hypnotic recall is especially important for several reasons. First, hypnosis intensifies the relatedness to the therapist. The patient is in a position of accepting relatively uncritically instructions from the therapist. As noted earlier, although hypnotized individuals are always capable of critically judging input and even of removing themselves from the hypnotic state, they are less likely to do so because of the narrowness of focus they tend not to contrast and compare. Second, trauma victims are often irrationally ashamed of the trauma. They felt humiliated and degraded by the experience (often the conscious intention of the attacker in an assault). They frequently blame themselves irrationally for the experience as a means of maintaining a fantasy of control over an event that rendered them helpless. Helplessness, not pain or fear, is the core feeling defended against in the aftermath of trauma. Many people find it less painful to blame themselves unfairly for not having avoided the inevitable than to face and accept the fact that for a period they were physically helpless. This sense of shame often forces people inward. They fear rejection when they reveal the aspect of themselves as well. Why should the therapist accept them any more than they do?

Thus, patients project feelings about the trauma or assailant onto the therapist. It is commonly observed, for example, that rape victims feel raped again when asked to go over the details of the assault with police investigators. The assailant has disappeared, leaving deep feelings behind, which often vent themselves on those whose job it is to elicit memories of the trauma and emotions that go with them.

This projection means that the handling of the therapeutic relationship is especially delicate. Professionally appropriate consolation is critical. It on the one hand reassures the patients that what makes them ashamed does not repel the therapist. It also helps to distance the therapist from the assailant in the patient's mind, despite the inevitability of the transfer of feelings from assailant to therapist. The kind of remark that is quite helpful is something such as, "I am terribly sorry that this happened to you. It must have been very frightening and painful." This lets the patient know that the therapist understands the depth of her discomfort and cares about her despite what she has been through. Remoteness or silence often serves to reinforce patients' conviction that they are unacceptable as people after what they have been through. Furthermore, inquiring about the patient's perceptions of the therapy is crucial. They may understandably find the discussion of past traumas or negotiations over conflicts among identities stressful, and inquiring about whether they feel it is helpful or hurtful can provide useful opportunities to discuss feelings about the therapist. This concern for the patient's well-being also helps differentiate the therapist from abusive parents. People raised by someone who hurts rather than helps them are likely to expect the same from therapists, but abusers rarely inquire about how hurtful they are being.

The intense emotions characteristic of hypnotic retrieval of traumatic memories may facilitate the expression of inner fantasies and deep personal experiences. In some patients, the hypnotic state will facilitate a sense of infantile dependency in which the transference expectations are intensified. As in any other therapeutic relationship, the quality and affective content of this transference reaction will be based on the patient's early object relations. A difference may be the intensity of the feelings developed due to the strong emotions that arise during trance. As in any other therapeutic relationship, therapists may erroneously foster these infantile dependency feelings or they may use the transference to foster patients' ability to help themselves and create an environment of control and self-mastery.

The hypnotic trance may allow for such an intense experience during the recovery process that some patients may have a sensation or feeling that the therapist had "been there" with them at the moment of trauma. The presence and intensity of transference reactions during the psychotherapy of trauma victims are enormous. The use of hypnosis does not prevent development of these reactions. On the contrary, it may facilitate their emergence. In many instances, the development of transference reactions may occur earlier than in conventional therapy due to the intensity with which the material is expressed and the speed at which memories are recovered.

Memory Distortion

Hypnosis can enhance memory recall due to the heightened concentration that allows patients to focus intensely on a given time or place. The principle of state-dependent memory may explain why the mere entrance into a trance state can facilitate retrieval of memories associated with a state of mind similar to the time of trauma (Bower 1981). To the extent that trauma victims were in a dissociated state at the time of the trauma, entering the structured dissociation of hypnosis may well facilitate access to trauma-related memories. But not all recovered memories are true, although corroboration is often available for previously dissociated memories (Butler and D. Spiegel 1997; Chu et al. 1999; Williams 1993, 1994, 1995). Hypnosis facilitates recall but not its accuracy. The risk is that patients' estimation of accuracy may increase, whereas the accuracy itself does not (Dywan and Bowers 1983; D. Spiegel 1998b; D. Spiegel and Scheflin 1994; Wagstaff 1984). High suggestibility is inherent to the hypnotic process. This facilitates the possibility that information may be implanted or imagined. Furthermore, patients may have such an intense experience that they may enhance their conviction that their memories are veridical regardless of their accuracy—the problem of "confident errors" (Laurence and Perry 1983; McConkey 1992; Orne 1979).

Because of the possibility of confabulation and contamination, therapists are warned about "believing" everything a patient recalls. Therapeutic judgment should be used when analyzing and interpreting patients' hypnotically recovered material. There is no way of knowing whether any memory reported, via hypnosis or not, is accurate in the absence of external corroboration. A lower standard of evidence is needed in the psychotherapy situation than were the patient to decide to take allegations of abuse to court or to confront an abusive family member (which is rarely helpful).

Despite concern that hypnosis inevitably contaminates memory, the research literature on hypnosis and memory indicates that hypnosis affects belief more than content (Butler and D. Spiegel 1997; Butler et al. 1996; Dywan and Bowers 1983; McConkey and Sheehan 1995; Sheehan et al. 1991). Any memory retrieval technique that increases the production of memories may affect the willingness of a subject to report a thought as a memory (Erdelyi and Kleinbard 1978). Hypnosis is simply one more technique by which memories are retrieved and discussed. It is especially useful in the context of traumatic dissociation (Orne et al. 1985).

Outcome

Although there are no controlled trials of the efficacy of hypnosis in treating dissociative disorders, the clinical literature indicates that it is a useful tool (Kluft 1984, 1992; Putnam 1989, 1992). A recent survey of 305 clinicians indicated that individual psychotherapy facilitated by hypnosis on a twice-a-week basis was the primary treatment modality for DID patients, whereas treatments with anxiolytics and antidepressants was a secondary adjunctive tool. For more detailed discussion of the psychotherapy of dissociative disorders, several excellent texts are available (Kluft 1993, 1999; Maldonado et al. 1998; Maldonado and D. Spiegel 1998; Putnam and Loewenstein 1993; Ross 1989; D. Spiegel 1993, 1997; D. Spiegel and Maldonado 1999).

Conclusion

Hypnotic-like phenomena occur spontaneously among individuals with posttraumatic and dissociative disorders. They are better controlled by identifying, accessing, and teaching patients how to manage their hypnotic and dissociative states. Hypnosis is both the medium and the message, a vehicle for the expression of posttraumatic symptoms, and a means for learning to control such symptoms. Formal hypnotic induction can be used to access and work through trauma-related memories and to provide access to and means of connecting dissociated components of identity, memory, and consciousness.

Epilogue

Review of the Main Themes

We present the various concepts regarding hypnosis and psychotherapy in this book in the hope that they will be challenging and useful in the ongoing process of therapy and research. Many of the concepts that we proposed in the first edition in 1978 have been tested and confirmed; others have been changed as new data emerged. The past 25 years have been productive, but there is more basic and clinical research needed on hypnosis and its role in therapy.

It is in this spirit that throughout the book we have differed with certain traditional concepts of psychotherapy and hypnosis. We take an eclectic view of the psychotherapies, advocating only that the type of therapy should be selected with the needs and capacities of the patient in mind. Furthermore, we have demonstrated that the systematic assessment of hypnotizability with the Hypnotic Induction Profile (HIP) can help the clinician in selecting the most appropriate psychotherapy. We have used the HIP as a way of learning more about brain-mind interaction and identifying configurations of responses on the HIP that are useful to the clinical investigation.

We have used several criteria in refining parts of our theoretical approach to therapy. Many of the constructs initially came into being because in some intuitive sense they seemed to fit, and they also seemed acceptable when presented to patients. This intuitive sense of appropriateness might be characterized as a Dionysian criterion. In the Apollonian sense, the constructs fit with philosophical, anthropological, and psychological knowledge—especially existential philosophy, structuralism, and the more empirical statistical psychological approaches—that we used to test the theory of how to critically select a relevant treatment strategy. The theory continues to be altered in the back-and-forth process of continuous generation and clinical testing.

A major portion of our empirical testing has been conducted in an effort to determine whether the constructs are useful in the service of

a therapeutic strategy. Our approach has been based on the principle of parsimony. We have tried to carry the minimal theoretical baggage necessary to achieve a therapeutic goal.

Hypnotizability as a Test

We presented a description of the HIP in Chapter 3, Rationale for a Clinical Test, a 5- to 10-minute clinical assessment procedure of hypnotizability. (Reliability and validity data for the HIP are located in the appendix to this book.) We believe that the HIP measures two factors: a biological data point-the eye-roll sign-and the reactive sensorimotor phenomena in their relationship to this biological sign. The eye-roll sign shows constancy over time and can be observed when the subject is not in the trance state. In this sense, it is a measure of biological hypnotic potential. The reactive or performance items in the test measure the degree to which the biological capacity can be used to experience hypnosis. The HIP, we believe, indicates the relationship between biological capacity for hypnosis and expressed ability to use it. By inference, it provides information about both mental health and personality style. For example, consistency between the sensorimotor reactive components and the biological sign (the eve-roll) predicts relative mental health. We have also presented evidence that reactive sensorimotor components that collapse downward and do not fulfill the potential promised by the biological measurement indicate a break in the ribbon of concentration and are a strong clinical indication of biological or psychological dysfunction.

The Cluster Hypothesis

We have presented evidence to suggest that certain typical personality styles are associated with different levels of hypnotizability as measured by the HIP (see Chapter 5, The Person With the Problem: Apollonians, Odysseans, and Dionysians). For example, the highly hypnotizable Dionysians tend to be capable of such extreme absorption and inward concentration that they lose contact with their usual spatial orientation. Their time sense is primarily the present; past, present, and future are telescoped into *now*. The major premises in their life (i.e., their myth-belief constellations) tend to value affect rather than cold logic. They are relatively prone to accept control from others, trust others, suspend critical judgment as they affiliate with new information, and have a rich imagination.

The mid-range Odysseans have personality features that represent a mixture of the less extreme attributes of the Dionysians and Apollonians. They negotiate a middle way between the Scylla and Charybdis of life during their odyssey of living. Their spatial sense, time perception, and affective-cognitive balance tend to be midrange. When learning new information, they accommodate with a balance between fixity and uncritical acceptance. This group also has a tendency to oscillate between action and inaction, which, under stressful conditions, becomes action and despair.

The low-hypnotizable Apollonians, in contrast to the Dionysians, tend to value *brain* over *heart*. Even with intense concentration, they do not relinquish their spatial awareness, and their time perception is primarily past or future, often to the extent of ignoring the present. They prefer to control others, are less prone to trust, constantly use critical judgment in the assimilation of new information, and are more likely to find satisfaction in implementing rather than generating new ideas. They value their sense of responsibility and tend to stick to commitments once they make them.

We also have evidence that more serious psychopathology is associated with low hypnotizability. Under stress, the low-hypnotizability group tends toward obsessive-compulsive personality disorders, paranoid character disorders, and schizophrenia. However, those with high hypnotizability under duress tend to exhibit dissociative and posttraumatic stress disorders. The mid-range group under stress tends to develop impulse disorders, borderline character disorders, and reactive depressions. The HIP can be seen as a useful addition to the mental status examination in that it may help confirm or refute a tentative diagnosis of serious emotional disorder.

Restructuring

All of the individuals in those groups that are in the intact zone of hypnotizability on the HIP are likely to make good use of a brief symptom-oriented approach that emphasizes restructuring their view of themselves and their lives. Our overall approach to symptom-

oriented treatment using hypnosis involves eliciting the maximum response from the patient with the minimal amount of time and effort necessary from the therapist. Most of our treatment strategies involve one or two visits with the therapist during which a brief history is taken, the problem area is defined, the HIP is performed and evaluated, a decision is made to proceed with the symptom-oriented treatment, and the patient is taught a self-hypnotic exercise relevant to his or her problem.

All of the strategies are directed at making the best use of a given patient's hypnotic capacity and associated personality style in the service of a clearly defined therapeutic goal. Although taking a careful history, including inquiring about traumatic events, is important, a long psychoanalytic/developmental search for antecedents is not emphasized because the time involved for such exploration can undermine the momentum that the patient brings with him for therapeutic response. The restructuring strategy is designed to invite rather than coerce the patient. It emphasizes commitment to a new way of relating to himself and his body, rather than submission to a series of instructions given by the therapist. The patient is invited to clarify the choices he is making and to decide whether a reorientation is consistent with goals that are important to him, such as respect for and protection of his body.

We have presented treatment strategies for such problems as smoking, obesity, anxiety, insomnia, phobias, pain, stuttering, asthma, and other functional and psychosomatic disorders. We have emphasized the fact that hypnosis per se is not treatment; however, in the service of a good therapeutic strategy, hypnosis can facilitate and accelerate treatment.

We have outlined a therapeutic strategy that uses dialectical principles in helping a patient use her symptom as an occasion for reassessing and changing her relatedness to herself and her body. In particular, we have found that the most effective therapeutic strategies used in association with the trance state are those that help the patient explore and develop a sense of relatedness to her body and adopt a respectful and protective stance toward it. These therapeutic approaches avoid obsessional activity or denial about the nature of the problem, and they avoid putting the patient and the therapist in a position of fighting the symptom. Rather, they emphasize the idea that in the course of exploring the sense of dialectical relatedness to her body, the patient will naturally place the symptom in a new perspective and overcome it. The trance state—with its natural sense of dissociation and comfortable sense of floating in relation to one's body—provides added leverage in making this concept physically as well as psychologically real to the patient.

The element of surprise is also important. A patient often presents to a hypnotist expecting to be controlled and manipulated. This occasion can be turned around to demonstrate to the patient how easily he can enhance and expand his own sense of control of himself and his body. In discovering that by using intensely focused imagination he can experience less control or altered sensation in one arm and hand, a subject learns to expand his limits of control. The clarification of this misconception about control and manipulation during hypnosis can be used to enhance a patient's own sense of mastery.

Uses of the Hypnotic Induction Profile in Personal Exploration

We have presented evidence that the choice of an appropriate treatment strategy can be facilitated by information gained from the HIP. For example, patients with intact profiles have an intact capacity for mobilizing their resources and for committing themselves to change. Thus, appropriate psychotherapeutic intervention is of primary importance.

If intensive psychotherapy rather than brief symptom-oriented treatment is indicated, the therapist should bear in mind that Apollonians have a style that makes them most likely to accept and benefit from the various introspective, analytically oriented psychotherapies. The mid-range group prefers somewhat less emphasis on analysis as such and responds better to consolation and confrontation from the therapist in the Gestalt or existential mode. The Dionysians eschew *why* therapy and prefer *what* therapy. They want firm guidelines to enhance their capacity to generate their own decisions and directions. If arbitrarily pressed into self-investigation, they can become confused, and the therapy is converted into an exercise in compliance rather than an unearthing of insight. Once appropriate goals for the treatment are established, Dionysians prefer to affiliate with the therapeutic model and can readily accept guidance to enhance internal discipline.

In summary, low-hypnotizable patients are best served by a therapeutic strategy that uses reason to free and mobilize affect; highly

hypnotizable patients are most effectively treated with a therapy that uses affective relatedness to the therapist in the service of enhancing rational control. Patients in the mid-range respond to an approach that uses a balance of rational and affective factors in helping the patient confront and put in perspective his or her own tendency to oscillate between periods of activity and despair. With all three modes, the treatment can culminate with a puzzle that the patient can identify with and respond to with a restructured sense of mastery.

However, the type of treatment for the nonintact, soft, and decrement groups is chosen at a different level—external application instead of internal revision. Individuals with problems such as schizophrenia do not easily maintain a disciplined response of concentration when tested, and they are less likely to accept psychological or emotional commitments to a treatment goal. Therefore, the various somatic treatment modalities, such as psychotropic medication; family, social, or institutional containment; and direct supportive care, are more relevant for this group.

We hope to have demonstrated that a systematic, clinical assessment of hypnotizability can provide a great deal of information about a patient in a brief period. A hypnotizability assessment can also indicate the most appropriate and aesthetically attractive style of therapeutic intervention for a given patient.

Implications for the Future

The emergence of modern psychotherapy has been characterized by the development of many modes of therapy and many divisions among the various schools so that the adherents of one approach are often unaware of the value of other approaches. Because of the ambiguity that is necessarily inherent in the field of psychotherapy, it is understandable that therapists are in a constant quest for a sense of certainty. Sometimes, the urgent need for certainty leads to the premature selection of a therapeutic strategy and an over-commitment to the premises and specific contents of a given treatment modality.

In the first edition of this book, we presented the use of a disciplined probe to facilitate a clinical evaluation in a relatively short time as a new way of developing a sense of certainty. Such a diagnostic probe can elucidate data about the personality style, the nature of the problem, and the type of therapy most appropriate for a person at a given time. This approach continues to promote a wider appreciation of all the therapeutic modalities, and it also provides both the patient and the therapist with opportunities for informed choice. The use of a clinical instrument (i.e., the HIP) that is subject to reliability and validity studies added a new dimension to the art of clinical assessment. The HIP has continued to lead the way toward a more scientifically disciplined approach to clinical evaluation.

Studies have expanded into the disciplined psychosomatic research areas involving the interface between neurophysiology and psychological phenomena. The HIP has served as a bridge between laboratory observations and rich and diverse clinical data, broad fields that were formerly isolated from each other (H. Spiegel 1997, 2000).

The categories that we have presented are meant to be operational hypotheses for generating new hypotheses on the basis of accumulated data. They are in no way meant to be absolute. The purpose is not to reduce people to categories but rather to use systematic information to enhance their capacity to make choices. As noted in the preface to this book, "If you can measure it, it is science; everything else is poetry." Yet, assessment techniques have limitations. In the therapeutic odyssey, the clinician is best guided by both the science of Apollo and the poetry of Dionysos.

In his brilliant treatise *Out of Its Mind: Psychiatry in Crisis*, Hobson (2001) "views all mental conditions as part of a single brain-state *continuum*" and notes that "there is compelling reason for psychiatry to adopt a new brain science that will be essentially neurodynamic." But he fears that psychiatry cannot yet say, "Give us the tools and we will finish the job," because "psychiatry's own split personality is not yet healed and not quite ready to move ahead like that."

We propose that one response to this challenge is the systematic assessment of hypnotizability and the use of hypnosis, a technique at the cutting edge of the mind/brain interface. Tools such as the HIP and the Apollonian-Odyssean-Dionysian Personality Inventory allow for the following findings in a relatively short period, approximately 15 minutes:

- A determination of the subject's personality style that focuses on the capacity for undertaking responsibility (Rychlak 2000)
- A measure of hypnotizability that involves an *integrated* biopsychosocial experience and yields data on the subject's capacity to use and incorporate hypnotic techniques

• A transition from assessment to a choice of psychotherapeutic strategies that can be coupled with the patient's willingness and motivation

This clinical clarification is possible with the tools that have been presented in this book. The use of these tools allows one to sharpen diagnostic assessment, identify relevant individual characteristics essential for commitment to treatment, and choose more effective therapeutics. This approach is consistent with the neurodynamic framework; it identifies and incorporates neurobiological ability into a psychotherapeutic framework (Hobson 2001; H. Spiegel 2000).

Hypnosis is a fertile phenomenon for exploration by both the researcher and the clinician. It is a style of concentration, not a therapy—a capacity, not a mystery. When the therapist applies the techniques described in this book, he or she is making maximum use of a patient's hypnotic capacity and motivation for change.

APPENDIX

Interpretation and Standardization of the Hypnotic Induction Profile

A Two-Factor Theory of Clinical Hypnotizability

There are several hypotheses associated with most personality profile configurations. In general, intact profiles indicate that the biologically based hypnotic potential, represented by positive eye-roll (ER) score, has been expressed [i.e., control differential (CD) and levitation (Lev) scores are nonzero]. It is thought that this biologically based hypnotic potential constitutes evidence of clinical hypnotizability. The special intact profile may indicate particularly strong motivation to benefit from or to experience hypnosis. Among the nonintact patterns, the potential suggested by the positive ER scores is not expressed, suggesting little or no hypnotizability. The zero profile indicates an absence of biologically based hypnotic potential (ER is scored 0).

These hypotheses are set in the context of a two-factor theory of clinical hypnotizability, the biological potential and the psychological expression (H. Spiegel et al. 1976), which was developed to account for some of the findings reviewed here. It is hypothesized that the two factors are measured by ER and the induction score. The ER sign is thought to be a measure of potential hypnotic capacity. This potential

This appendix is adapted from Stern DB, Spiegel H, Nee JC: "The Hypnotic Induction Profile: Normative Observations, Reliability and Validity." *American Journal of Clinical Hypnosis* 21:109–133, 1978. With permission of the American Society of Clinical Hypnosis. The research summarized here as well as the writing of this paper were supported in part by the Charles E. Merrill Trust and the Merlin Foundation.

is conceived of as biologically based and probably inborn. The score on the Hypnotic Induction Profile (HIP) indicates whether potential hypnotic capacity can be expressed.

The profile configuration is a method of representing the *type* of relationship between potential hypnotic capacity and its expression. Several combinations are possible:

- No potential, no expression of potential (regular zero profile)
- Some potential, little or no expression of potential (soft and decrement profiles)
- Some potential, some expression of potential (regular and special intact profiles)

Factors related to impaired concentration, as found in severe psychopathology, determine when hypnotic potential is not expressed as usable hypnotizability. Thus, a disproportionate number of patients who score the soft and decrement profiles are characterized by relatively severe psychological disturbance. This clinical observation was evaluated by an investigation (H. Spiegel et al. 1977) summarized in the section Validity of the Hypnotic Induction Profile.

A second inference made from the HIP score is whether the patient can benefit from psychotherapy in which hypnosis plays a significant part. According to the two-factor theory, clinically usable hypnotizability should be present only when there is evidence of both hypnotic potential and its expression. Hypnotic potential without hypnotizability (soft and decrement profiles) should predict poor clinical outcome when psychotherapy includes hypnotic strategies. A 0 score on the measure of potential (zero profile) should predict poor outcome no matter how the patient scores on the measure of usable capacity. Both the nonintact and zero profile types should predict poorer treatment response than the intact profile (i.e., profiles showing evidence of potential and capacity). These hypotheses have been examined (D. Spiegel et al. 1993b; H. Spiegel and Greenleaf 1992; D. Spiegel and H. Spiegel 1987; H. Spiegel et al. 1975, 1978).

Note that the theory (as well as the validity of ER) hinges on the zero profile; although no restriction says that the induction scores of those patients earning zero profiles cannot be high, they should not respond to treatment as well as those with intact profiles because of the 0 ER score. And although zero profile types (like the soft and decrement types) can and often do fail the CD and Lev items, the zero profile

should have less value in the identification of severe psychopathology than the nonintact profiles, again because of the zero ER.

Clinicians having prior experience with the HIP will notice some changes in the categories of the profile configuration and in the way the configuration is conceptualized as a nominal scale, versus its prior presentation as an ordinal scale. However, all data presented in this appendix were derived by applying the scoring criteria exactly as we describe here and in the HIP manual (H. Spiegel 1974b, 1977; H. Spiegel et al. 1976; Stern et al. 1978). Earlier normative observations and statistical evaluations of reliability of the profile pattern (H. Spiegel et al. 1976) are no longer applicable and should be replaced by those to be described here. The earlier standardization data on the induction score and ER (H. Spiegel et al. 1976) may still be used.

Normative Observations

All data in this section are based on the HIP scores of 4,621 private psychiatric patients seen and tested by H. Spiegel between 1969 and 1976 (H. Spiegel et al. 1975; Stern et al. 1978). Approximately 500 of the patients seen in 1969 and 1970 received the items of the profile scale but were not administered one of the induction scale items, "Float," which had yet to be devised. Other than these 500 patients, who are not included, the normative sample is a consecutive series.

Four demographic variables were included in the early data analyses: sex, age, educational level, and marital status. The only effect (or interaction) for marital status was a mild depressing effect on the scores of widowed persons, who made up a very small proportion of the sample. It was decided that the small clinical gain that might be involved in presenting these data was not worth the complication.

It was soon clear that age was by far the most important of the three remaining demographic variables. However, because there were some smaller significant effects for educational level, sex, and some of the two-way interactions between the three factors, these data are also presented.

Evaluation of interactions required analyses of measures of central tendency; therefore, the data had to be presented in that form. But we also wanted to present the distributions of the HIP scores in a more direct way. The solution we arrived at was to present the data both ways and to present the distribution of scores by age level.

The combined frequency distributions of age, sex, and educational level in the normative clinical sample appear in Table A–1. The sample is obviously heterogeneous, underlining the need for norms specific to subject characteristics. The immediately apparent aspects of the sample are its heavy concentration of patients in young to middle age (74% were between 25 and 54 years old), the high proportion of women (56%), and the very high educational level (74% had at least some college). Men had a higher educational level than women but, contrary to most large samples, men were slightly older than women.

Most of the patients (60%) sought treatment for cigarette smoking. Of the others, a common complaint was of being overweight. The rest presented for a consultation regarding any one of the wide range of problems seen in the practice of a private psychotherapist.

The HIP was always administered in the first treatment session, and most patients were seen only once. The reason for collecting this information was to facilitate the treatment (or referral) process. The idea of conducting quantitative research was conceived later; thus, the standardization studies, as well as the other investigations to be summarized here, were retrospective in design.

Eye-Roll Sign

Table A-2 shows the distribution of ER scores by age. By reading across the stepwise changes in each row of the table, it is clear age affects ER scores. For instance, the frequency of 0 ER scores increases from 1.5% in the youngest group (younger than age 25 years) to 16.5% in the oldest group (older than age 64 years). There was no one in the oldest group who scored an ER of 4.0, whereas 6.1% of the youngest group performed in this range. (Approximately 10% of the total sample had a positive squint score. The squint scores are not presented separately but are incorporated in the scores for ER.)

The clinical use of these findings depends on how they are viewed. The most parsimonious interpretation is that the decline in ER represents a decrease with age in the flexibility and strength of the extraocular muscles. The less simple explanation—that a decline in ER reflects a decline in the hypnotic potential that ER is said to represent—should not be favored unless there is some reason to reject the former hypothesis.

TABLE A-1Distribution of the Normative Clinical Sample by Age, Sex, and Educational Level

Age in Years	Elementary School	Secondary School	Some College	College Degree	Graduate Training	Total	Percentage of Female Sample		
FEMALES									
Younger than 25	5	66	91	50	27	239	9.2		
25–34	6	137	197	214	154	708	27.3		
35–44	4	162	168	172	133	639	24.6		
45–54	4	195	173	113	87	572	22.0		
55–64	10	128	83	54	40	315	12.1		
Older than 64	9	44	38	28	4	123	4.8		
Total	38	732	750	631	445	2,596	_		
Percentage of female sample	1.5	28.2	28.8	24.3	17.1	—	100.0		

Highest Educational Level Attained

(continued)

TABLE A–1 Continued

-

	н	ighest Educati						
Age in Years	Elementary School	Secondary School	Some College	College Degree	Graduate Training	Total	Percentage of Male Sample	
MALES								
Younger than 25	3	51	62	33	22	171	8.4	
25–34	5	51	81	121	171	429	21.2	
35–44	5	83	96	159	200	543	26.8	
45–54	12	125	76	173	145	531	26.2	
55–64	13	72	51	65	55	256	12.7	
Older than 64	6	21	19	16	33	95	4.7	
Total	44	403	385	567	626	2,025	_	
Percentage of male sample	2.2	19.9	19.1	27.9	30.9	—	100.0	

	Age in Years										
Score on Eye-Roll Sign	Younger Than 25 (%)	25–34 (%)	35–44 (%)	45–54 (%)	55–64 (%)	Older Than 64 (%)					
0	1.5	1.1	1.9	4.1	4.8	16.5					
1.0	5.4	8.7	9.2	11.8	23.1	23.0					
1.5	9.5	10.4	12.2	14.0	15.0	21.6					
2.0	23.7	26.7	28.8	31.0	28.2	22.9					
2.5	20.8	22.9	20.4	19.1	16.4	10.1					
3.0	22.7	19.0	17.6	13.9	10.9	5.0					
3.5	10.3	7.1	6.2	3.8	1.1	0.9					
4.0	6.1	4.1	3.6	2.3	0.7	0.0					
Total	100.0	100.0	100.0	100.0	100.0	100.0					

TABLE A-2

Normative Observations for the Eye-Roll Sign: Effects of Age on the Distribution of Scores

Note. N=4,621. If desired, the raw data can be retrieved by multiplying the entry in this table by the appropriate marginal frequencies in Table A–1.

If the simpler way of understanding this finding is tentatively accepted, then the meaning of the ER score varies according to age. Very roughly speaking, the low and high ranges of ER can be defined as follows: At age 44 years or younger, a low ER score is 1.5 or less and a high score is 3.5 or 4.0. At ages 45-54 years, the low range is 1.0 or less and the high range includes some people who score 3.0. At ages 55-64 years, 0 is the only score that can with certainty be included in the low range, and the high range includes people who score 3.0. Older than age 64 years, the high range drops even further to include some people scoring 2.5, and the low range is restricted to 0. These remarks are only guidelines because the data cannot be broken down in a way that assigns an equal proportion of each age group to the low and high range. H. Spiegel (1975; H. Spiegel and Greenleaf 1992; Stern et al. 1978) has suggested that the range of ER is related to certain broad personality styles that the clinician needs to identify to provide the most appropriate treatment strategy.

Table A–3 presents expected mean ER scores for groups formed on the basis of age, sex, and educational level. The entries on the table were computed according to the following equation, which resulted from a multiple regression analysis performed on the ER scores:

Mean expected ER score=2.791-0.242 (age)+0.046 (sex) +0.037 (age×sex)-0.050 (education)+0.020 (education×age) +0.023 (education×sex)

In this equation, and in other equations presented here, age, sex, and educational level are entered as

Age in Years	Sex	Educational Level
Younger than 25=1	Women=0	Elementary school=0
25-34=2	Men=1	Secondary school=1
35-44=3		Some college=2
45-54=4		College graduate=3
55-64=5		Graduate or professional training=4
Older than 64=6		

Thus, the following equation would be calculated for a 48-yearold woman with a college degree:

Mean expected ER score=2.791-0.242 (4=age) +0.046 (0=sex)+0.037 [(4)×(0)]-0.050 (3=education) +0.020 [(3)×(4)]+0.023 [(3)×(0)]=1.92

All the main factors and interactions in the equation reached accepted levels of statistical significance. The nonlinear effects of age and education were also examined. Although the nonlinear effects of these two variables were statistically significant, they contributed very little of the variation of ER score. Therefore they were not included in the final regression equation. The regression analysis can be interpreted in the following way: As stated above, the strongest effect is age. Beyond that, male ER scores were 0.2 higher than female scores, even with age controlled.

However, this effect was due largely to the age-sex interaction. If we ignore the effect of education, when the age value was 1 (younger than 25 years), the male-female difference was 0.14, whereas when

TABLE A-3 Normative Observations for the Eye-Roll Sign: Effects of Age, Sex, and Educational Level on Mean Expected Score

	Age in Years								
Sex	Younger Than 25 (%)	25–34 (%)	35–44 (%)	45–54 (%)	55–64 (%)	Older Than 64 (%)			
М	2.6	2.4	2.2	2.0	1.8	1.6			
F	2.5	2.3	2.1	1.8	1.6	1.3			
Μ	2.6	2.4	2.3	2.1	1.9	1.7			
F	2.5	2.3	2.1	1.9	1.6	1.4			
М	2.6	2.5	2.4	2.1	2.0	1.8			
F	2.5	2.3	2.1	1.9	1.7	1.5			
М	2.6	2.5	2.3	2.2	2.0	1.9			
F	2.5	2.3	2.1	1.9	1.7	1.6			
М	2.6	2.5	2.4	2.2	2.1	1.9			
F	2.4	2.3	2.1	2.0	1.8	1.6			
	Sex M F M F M F M F M F	Sex Younger Than 25 (%) M 2.6 F 2.5 M 2.6 F 2.4	SexYounger Than 25 (%)25–34 (%)M2.62.4F2.52.3M2.62.4F2.52.3M2.62.5F2.52.3M2.62.5F2.52.3M2.62.5F2.52.3M2.62.5F2.42.5F2.42.3	Younger Than 25 (%) 25–34 (%) 35–44 (%) M 2.6 2.4 2.2 F 2.5 2.3 2.1 M 2.6 2.4 2.3 F 2.5 2.3 2.1 M 2.6 2.4 2.3 F 2.5 2.3 2.1 M 2.6 2.5 2.4 F 2.5 2.3 2.1 M 2.6 2.5 2.4 F 2.5 2.3 2.1 M 2.6 2.5 2.3 F 2.5 2.3 2.1 M 2.6 2.5 2.3 F 2.5 2.3 2.1 M 2.6 2.5 2.4 F 2.4 2.3 2.1	SexYounger Than 25 (%)25–34 (%)35–44 (%)45–54 (%)M2.62.42.22.0F2.52.32.11.8M2.62.42.32.1F2.52.32.11.9M2.62.52.42.1F2.52.32.11.9M2.62.52.32.2F2.52.32.11.9M2.62.52.32.2F2.52.32.11.9M2.62.52.42.2F2.42.32.12.0	SexYounger Than 25 (%)25–34 (%)35–44 (%)45–54 (%)55–64 (%)M2.62.42.22.01.8F2.52.32.11.81.6M2.62.42.32.11.9F2.52.32.11.91.6M2.62.52.42.12.0F2.52.32.11.91.7M2.62.52.32.22.0F2.52.32.11.91.7M2.62.52.42.22.0F2.52.32.11.91.7M2.62.52.42.22.1F2.42.32.11.91.7M2.62.52.42.22.1F2.42.32.11.91.7			

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Note. Entries in this table are derived by computation from a regression equation (see text). Standard error of estimate = .804. N=4,621. For cell n, see Table A–1.

the age values were 2-6, the differences were, respectively, 0.18, 0.23, 0.27, 0.31, and 0.36. In other words, the deterioration of ER due to age was faster among women than men. Presently, we can offer no satisfactory interpretation of this effect.

Surprisingly, educational level had some effect on ER. The group with the highest level of education scored 0.11 higher than the group with the least education. Although statistically significant, this effect was weak in comparison to the education–age interaction. The interesting finding here was that ER deterioration due to the age effect was halved among people with graduate or professional-level education. These data suggest that highly educated subjects age more slowly than subjects with less education.

Induction Score

The induction score, an actuarial index, was constructed on the basis of the intercorrelations and factor analysis of the HIP items presented by H. Spiegel et al. (1976) and reproduced here as Table A–4. To the surprise of the investigators who carried out the analysis, hypnotizability as measured by the HIP was not a unifactorial dimension. This finding led to the establishment of the two HIP scores and to the development of the two-factor theory of clinical hypnotizability. It was factor B in Table A–4 that suggested that the induction score might be a useful and feasible way to organize the data. (The sample in this analysis consisted of the 1,674 consecutive patients who were administered all induction items at the time of Stern et al. 1978.)

The individual items of the induction score are all "easy." Except for the Lev item, which was passed (score greater than 0) by 73% of the sample, the induction items were passed by 83%–85% of the sample. Failing an item was thus more informative than passing it. The absence of semi-difficult and challenging items made it likely that the induction score would not be highly sensitive to small differences within the range of hypnotizability.

Table A-5 shows that the effect of age on the frequency distribution of the induction score is quite similar to the effect of age on the distribution of ER (see Table A-2). For instance, scores of 0 increased from 3.4% of the youngest group to 17.4% of the oldest group, and scores above 9.0 declined from 12.7% of the youngest group to 1.4% of the oldest group. Here, though, the interpretation is not so muddied by nonhypnotic considerations. Clearly, the finding

TABLE A-4

Correlations Between Ten Components of the Hypnotic Induction Profile and Rotated Factor Analyses (N = 1,674)

		1	2	3	4	5	6	7	8	9	10
Cor	relations										
1.	Up-gaze	_									
2.	Eye-roll	0.77									
3.	Preparatory arm levitation	0.37	0.37	_							
4.	Tingle	0.03	0.05	0.11							
5.	Dissociation	0.09	0.12	0.21	0.27	_					
6.	Signaled levitation	0.17	0.21	0.40	0.20	0.43	_				
7.	Control differential	0.06	0.11	0.28	0.22	0.58	0.59				
8.	Cut-off	0.10	0.10	0.21	0.20	0.48	0.42	0.70	_		
9.	Amnesia	-0.05	-0.05	-0.02	0.02	0.03	-0.05	0.02	-0.01		
10.	Float	0.14	0.16	0.27	0.20	0.46	0.48	0.57	0.43	0.07	—
Fac	tor Loadings										
	Factor A	0.90	0.92	0.54	0.00	0.05	0.22	0.03	0.03	-0.12	0.13
	Factor B	0.03	0.08	0.31	0.40	0.76	0.70	0.88	0.77	0.12	0.73
TABLE A-5

	Age in Years								
Induction Score	Younger Than 25 (%)	25–34 (%)	35–44 (%)	45–54 (%)	55–64 (%)	Older Than 64 (%)			
0	3.4	2.8	4.2	6.5	9.3	17.4			
0.25–1	1.2	2.0	3.9	4.1	6.2	8.3			
1.25–2	1.7	2.4	3.4	3.6	4.6	7.8			
2.25–3	2.4	2.3	2.5	3.3	3.5	4.1			
3.25–4	2.6	2.8	3.1	2.7	3.5	2.3			
4.25–5	2.7	5.7	6.8	6.6	6.7	6.4			
5.25–6	6.9	9.3	9.9	13.2	12.5	14.7			
6.25–7	14.2	17.7	16.0	16.2	16.2	15.6			
7.25–8	27.4	26.1	25.8	22.7	20.2	14.7			
8.25–9	24.7	20.2	18.0	16.4	13.8	7.3			
9.25–10	12.7	8.6	6.4	4.7	3.5	1.4			
Total	100.0	100.0	100.0	100.0	100.0	100.0			

Normative Observations for the Hypnotic Induction Profile Induction Score: Effect of Age on the Distribution of Scores

Note. N=4,621. If desired, the raw data can be retrieved by multiplying the entry in this table by the appropriate marginal frequencies in Table A–1.

should be viewed as an indication that hypnotizability declines with age. It is a constant decline, particularly steep in later years, but observable in each decade of adult life. This finding closely parallels results of several investigations (Berg and Melin 1975; Gordon 1972; Morgan 1973), all of which used the Stanford Hypnotic Susceptibility Scale (Weitzenhoffer and Hilgard 1959).

Table A–6 presents the expected mean induction scores for all combinations of age, sex, and educational level. These figures again were computed by an equation that was the result of a multiple regression analysis:

Mean expected induction score=7.34-0.480 (age) -0.060 (sex)+0.098 (age×sex)+0.160 (education)

TABLE A-6

Normative Observations for the Hypnotic Induction Profile Induction Score: Effects of Age, Sex, and Educational Level on Mean Expected Score

		Age in Years							
Educa- tional Level	Sex	Younger Than 25 (%)	25–34 (%)	35–44 (%)	45–54 (%)	55–64 (%)	Older Than 64 (%)		
Elementary	М	6.9	6.5	6.1	5.8	5.4	5.0		
school	F	6.9	6.4	5.9	5.4	4.9	4.5		
Secondary	М	7.0	6.5	6.0	5.6	5.1	4.6		
school	F	7.1	6.7	6.3	5.9	5.5	5.1		
Some	Μ	7.2	6.8	6.5	6.1	5.7	5.3		
college	F	7.2	6.7	6.2	5.7	5.3	4.8		
College	М	7.4	7.0	6.6	6.2	5.9	5.5		
degree	F	7.3	6.7	6.4	5.9	5.4	4.9		
Graduate	М	7.5	7.2	6.8	6.4	6.0	5.6		
training	F	7.5	6.9	6.5	6.0	5.6	5.1		

Note. Entries in this table are derived by computation from a regression equation (see text). Standard error of estimate = 2.561. N=4,621. For cell *n*, see Table A-1.

As in the case of ER, each of the main factors and interactions in the equation reached statistical significance. The variables were entered into the equation according to the same code used in the regression analysis of the ER scores.

In general, the effects of age, sex, and education on the induction score followed the same pattern that was observed for ER. However, these effects were much smaller for the induction score than for ER. Approximately 10% of the variance of ER was explained by these three variables and their interactions, but only 6% of the variance of the induction score could be accounted for in the same way. Age was the most important predictor; age alone explained 5% of the variance. Among women, the increase in age from one level to the next was associated with 0.5 decline of the induction score. Among men, this effect was 0.4. Men generally had higher induction scores than

women, but this effect was highly dependent on age. At age 1 (younger than 25 years), the difference was 0.07. The differences increased with each age level to 0.18, 0.29, 0.40, 0.51, and 0.61. People with more education had higher induction scores. Each successive increase in educational level was associated with a 0.16-point increase in induction score. There was no apparent education–sex interaction, nor an education–age interaction.

Profile Configuration

Because the profile pattern is a nominal score, a regression analysis such as that performed on the ER and induction scores could not be carried out. However, the effects of the demographic variables can be reviewed in tabular form. Again, the age effect is very strong (Table A–7). From the youngest to the oldest age group, frequency of the two "zero" categories increases 10-fold. This finding is to be expected on the basis of the declines with age for ER and induction scores already described. Age also has a large effect on the incidence of the decrement. The interpretation consistent with the two-factor theory is that not only does hypnotic potential decline with advancing age, but also more and more people cannot express the potential they do possess.

The frequency of the soft profile is not affected by age. The incidence of the special intact profile is constant up to age 64 and then suddenly drops. As a result of these findings, one can conclude that the regular intact profile decreases in frequency with age.

Only the age effect is presented in Table A–7. Sex has a much smaller effect, not large enough for clinical significance: Women obtain a larger proportion of decrement patterns than men (15.4% vs. 13.3%), a larger proportion of soft patterns (20.0% vs. 16.7%), a larger proportion of regular zero profiles (2.2% vs. 1.3%), and a larger proportion of special zero profiles (1.3% vs. 0.9%). The frequency of three of these four categories increases with age (see Table A–7), which means that because the men in our sample had a higher mean age than the women, sex differences would probably have been larger if age had been controlled.

Educational level does have a small effect on profile scores (more education is associated with a decline in the proportion of intact profiles), but association between profile pattern and age is much more significant. Furthermore, educational level is severely contaminated by age: In general, those in the younger age groups have completed

TABLE A-7

Normative Observations for the Hypnotic Induction Profile Configuration: Effects of Age on the Frequency of Each Profile Category

	Age in Years								
Profile Configuration	Younger Than 25 (%)	25–34 (%)	35–44 (%)	45–54 (%)	55–64 (%)	Older Than 64 (%)			
Intact (regular)	68.3	64.6	62.9	56.4	52.1	42.2			
Special intact	4.0	3.4	3.4	4.1	4.4	1.8			
Soft	16.9	19.4	18.0	20.1	18.5	14.7			
Decrement	9.5	11.4	13.9	15.5	19.9	24.3			
Zero (regular)	0.5	0.4	1.0	2.6	2.5	11.9			
Special zero	1.0	1.0	1.0	1.6	2.8	5.0			
Total	100.0	100.0	100.0	100.0	1.00.0	100.0			

Note. N=4,621. If desired, the raw data can be retrieved by multiplying the entry in this table by the appropriate marginal frequencies in Table A–1.

more years of school. The effects of these two variables could be extricated from one another in the regression equations, but not in the case of the profile configuration.

In practice, a subject's profile configuration should be compared to the age norms in Table A–7.

Reliability

Eye-Roll Sign

When two independent examiners scored the same patient's ER, the intraclass correlation coefficients representing the degree of relationship between the two sets of scores were 0.80 among a group of 53 psychiatric clinic outpatients (H. Spiegel et al. 1976) and 0.73 among a group of 43 private psychiatric patients (DeBetz and Stern 1979). Wheeler et al. (1974) reported that the product-moment

correlation between two sets of ER scores, each collected by a separate examiner, was 0.75. In a group of 75 private psychiatric office patients seen twice by one of the authors (H.S.) after intervening periods of a few months to 3 years, the correlation between first and second ER scores was 0.90. This represents excellent test-retest reliability.

Induction Score

Among a group of 75 private psychiatric patients, level of test-retest reliability was reported to be 0.76 (H. Spiegel et al. 1976). Degree of interrater agreement for the induction score was calculated to be 0.75 for the group of 53 psychiatric clinic outpatients (H. Spiegel et al. 1976). These coefficients indicate adequate reliability for the induction score.

Profile Score

In the paper by H. Spiegel et al. (1976), degree of reliability of the profile score was represented by a correlation coefficient. However, the same simple strategy could not be followed here. Because the profile score is now considered a nominal scale, degree of agreement had to be determined separately for each of its categories. The statistic used for estimation of reliability was *kappa* (Fleiss 1971). *Kappa*, a statistic ranging from 0 to 1.0, indicates the degree of agreement (in two sets of nominal scores), which is above the degree of agreement expected by chance. It is directly comparable to the intraclass correlation coefficient, which makes it possible, in the case of the present data, to estimate the reliability of ER, induction score, and profile configuration using the same scale.

Table A–8 presents test–retest results for 167 patients seen by H.S. in private psychiatric practice. They constituted a consecutive series of patients who were administered a second HIP. The intervening time period ranged from a few weeks to 6 years. Of the 99 patients who scored a regular intact profile the first time, 90 (91%) also obtained a regular intact profile on their second testing (kappa=0.70). Ten of the 14 patients (71%) who first scored the special intact pattern obtained the same pattern on retest (kappa=0.68). For the broader category of intact profiles, test–retest reliability was excellent:

TABLE A-8

Test-Retest Reliability of the Six Hypnotic Induction Profile Configurations

Profile Configuration		Profile Configuration Obtained on Second Examination						
Obtained on First Examination	Total	Intact (Regular)	Special Intact	Soft	Decrement	Zero (Regular)	Special Zero	
Intact (regular)	99	90	5	3	0	0	1	
Special intact	14	3	10	0	0	0	1	
Soft	21	14	0	7	0	0	0	
Decrement	29	9	0	6	14	0	0	
Zero (regular)	1	0	0	0	0	1	0	
Special zero	3	1	0	0	0	0	2	
Total	167	117	15	16	14	1	4	
Карра	_	0.70	0.68	0.34	0.63	1.00	0.57	

Of 113 patients whose initial HIP fell in the intact range, 108 (or 96%) also scored an intact profile on the second examination.

The decrement pattern also showed acceptable stability over time (kappa=0.63), but two-thirds of the patients who were initially "softs" scored a different pattern on retest (kappa=0.34).

The trend was toward a regular intact profile on retest: 59% (99) of the sample scored a regular intact pattern on the initial testing, and 70% (117) scored a regular intact pattern on the second testing. This may have been a phenomenon of regression to the mean—that is, CD and Lev were so "easy" that subjects who failed them once tended to pass them on the second try. However, there is at least one reason to doubt the completeness of this interpretation. Despite its lower testretest reliability, the data in Table A–8 indicate that the soft score predicts the same relatively poor response to treatment as does the decrement profile. (Both scores predict poorer therapeutic outcome than the intact profile.) This fact makes it seem worthwhile to retain the soft score and look for the source of its low stability in what it does measure, rather than viewing the instability as a sign that the score should be discarded.

Table A–9 presents data from the two studies of interrater reliability of the profile configuration. Study I (H. Spiegel et al. 1976) was performed in the outpatient department of the Payne Whitney Clinic at Weill Cornell Medical School, by one of the authors (H.S.) and a colleague. The two testers administered the test independently and without knowledge of prior test findings. Order of the examiners was systematically varied; there was no evidence of an order effect. All these comments also apply to Study II, except that it was performed in a private psychiatric setting for clinical purposes, and the testers were H.S. and a second colleague. In Study I the colleague was a man; in Study II the colleague was a woman. In Study I, the intervening time between testing was only a matter of hours; in Study II, the intervening period ranged from 1 day to several years.

Because the direction of the findings of the two studies was similar, they are collapsed for the purpose of discussion. (The larger proportion of decrement profiles in Study I is to be expected. It represents the fact that the clinic sample was more severely disturbed than the sample drawn from private practice. The decrement pattern seems to predict the presence of severe psychopathology.) The results were that the regular intact category showed good reliability: 30 of 37, or 81%, of the subjects who scored a regular intact pattern on the first examination also did so on the second (kappa=0.65). Also,

TABLE A-9

Interrater Reliability of the Six Hypnotic Induction Profile Configurations: Two Studies

First Examiner	Total	Intact (Regular)	Special Intact	Soft	Decrement	Zero (Regular)	Special Zero
Intact (regular)	37	12 (18)	2 (0)	1 (0)	3 (1)	0 (0)	0 (0)
Special intact	3	1 (1)	0 (1)	0 (0)	0 (0)	0 (0)	0 (0)
Soft	15	4 (3)	0 (0)	5 (2)	1 (0)	0 (0)	0 (0)
Decrement	23	1 (2)	0 (0)	3 (0)	14 (3)	0 (0)	0 (0)
Zero (regular)	0	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Special zero	_	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (0)
Total	80	42	3	11	22	0	2
Карра	_	0.65	0.32	0.50	0.71	—	1.0

Note. Data from Study II are shown in parentheses.

as before, the general intact category showed a high degree of intertester agreement (35 of 40, or 88%). However, *kappa* was low (0.32) for interrater reliability of the special intact pattern.

A relatively low proportion of initially soft profiles (7 of 15, or 47%) remained soft on the second tester's examination (kappa=0.50). The decrement pattern showed a much higher degree of interrater agreement: 20 of 23 (87%) remained in the decrement category on second testing (kappa=0.71). By collapsing soft and decrement profiles to form the group of nonintact profile patterns, we found that 28 of 38 (74%) patients who were nonintact on initial examination were also nonintact on second examination.

The reliability of neither the special zero nor the regular zero patterns could be evaluated on the basis of these data.

In summary, the regular intact profile and the intact profiles as a whole showed a high degree of test-retest and intertester reliability. The nonintact patterns had a much lower degree of reliability. Of the two nonintact patterns, the decrement pattern was the more stable. This finding coincides with the observation made by one of the writers (H.S.) that the decrement profile is earned by persons who show a definite "break in the ribbon of concentration," and the soft pattern is obtained by persons with less severe psychopathology, who present a kind of "wavering" back and forth across the boundary between intact and mildly impaired concentration.

Validity of the Hypnotic Induction Profile

Validity as a Measure of Clinically Usable Hypnotizability

Estimates of the degree of relationship between the HIP scores and scores on laboratory tests of hypnotizability are available (Frischholz et al. 1980; Orne et al. 1979). It will simplify matters, of course, if the correlations are high enough to permit the conclusion that the HIP and these previously standardized measures are tests of the same phenomena. However, because the HIP purports to measure clinically usable hypnotizability, the clearest test of its validity is the degree of association between the scores and the outcome in psychotherapy in which hypnosis is used.

Collaborative studies were conducted by the developers of the Stanford Hypnotic Susceptibility Scales, the Harvard Group Scales of Hypnotic Susceptibility, and the HIP to determine the relationships among the measures. These studies were conducted at the University of Pennsylvania with 87 subjects and at Stanford University with 58 subjects. The studies found moderate but significant correlation between scores on the Stanford/Harvard scales and the HIP, represented by an overall correlation of 0.34 (Orne et al. 1979). It is worth noting that the Stanford/Harvard scales are far longer, taking approximately 1 hour to administer. The HIP, which requires 5 minutes, takes approximately as long as any of the 12 items on the longer scales. Any single item on these scales only has a correlation of approximately 0.6 with the total score (Hilgard 1965), so the possible "ceiling" correlation between the HIP and the total Stanford/Harvard scale score is more like 0.6 than 0.9 or better. A subsequent study comparing the scales reported a higher correlation between them, on the order of 0.6 (Frischholz et al. 1980).

These studies demonstrate a significant and positive correlation between the HIP and the other scales, indicating they are in the same domain but do not measure the exact same thing. The late Ernest R. Hilgard once commented to one of us (D.S.) that, "The Stanford scales are easy to understand but hard to pass, and the HIP is hard to understand but easy to pass. I think the Stanford scales emphasize compliance while the HIP emphasizes comprehension." He was indeed correct, and the HIP was developed to emphasize reports of cognition and experience, whereas the Stanford scales were developed at a time when measuring behavior was considered most important.

The usual problems in carrying out this kind of study include controlling for the content and length of therapy across groups and deciding on a suitable measure of outcome. These problems do not exist in the case of follow-up data on the single-session treatment of smoking, which is a standardized approach varying only slightly from patient to patient (H. Spiegel 1970).

The earlier follow-up reports on this technique of treating smokers (H. Spiegel 1970) were concerned with a sample of approximately 600 patients. We currently are beginning the questionnaire follow-up of a group of 3,600 smokers. At this point, information on the induction score is not available, but we do have preliminary data on the profile configuration (Table A–10) (D. Spiegel et al. 1993b).

The data in Table A–10 are limited to 10-day follow-up because at the next follow-up period (6 months), profile types began to show so much difference in the "no response" column that differences in the

TABLE A-10

Hypnotic Induction Profile Configuration and Clinical Outcome (10 Days Posttreatment) in Single-Session Treatment of Smoking

		Clinical Outcome by Self-Report						
Profile Configu- ration	N	% Success- ful (No Smoking)	% Unsuc- cessful (Still Smoking)	% No Response to Follow-Up	% of Respondents Who Report Success			
Special intact	78	47.4	21.8	30.8	68.5			
Regular intact	2,155	38.8	29.9	31.3	56.5			
Soft	692	27.5	38.3	34.2	41.8			
Decre- ment	542	22.1	41.9	36.0	34.5			
Special zero	69	27.5	40.6	31.9	40.4			
Regular zero	85	17.6	44.7	37.6	28.3			

positive and negative outcome columns could not be clearly interpreted. That is, the groups with the lowest success rates also had the lowest response rates, raising the possibility that profile types differed mainly in percentage of responders and not in percentage of successful outcomes. This pattern can be seen even in the 10-day data in Table A–10. At 10 days, though, the differences among the groups in the rate of no response were much smaller than the differences in success rates. Therefore, the data in Table A–10 are probably a reflection of real differences in the proportion of successful outcomes associated with various profile patterns.

Data for 6-month, 1-year, and 2-year follow-up have been analyzed (D. Spiegel et al. 1993b). We followed the conservative course of comparing the proportion of successful outcomes to the proportion of patients who responded. Because it is our impression from an unsystematic canvassing of nonresponders that most members of the group were unsuccessful, our method of analysis is counterintuitive, minimizing what we think may be larger differences. However, adopting this method of analysis buttresses the validity of any of the predicted differences that are observed.

The following hypotheses regarding clinical hypnotizability and profile configuration are supported by the data in Table A–10. (All differences are based on responders only and were significant beyond the 0.01 level.)

- 1. The success rate of persons with intact profiles (56.9%) is higher than that of those with nonintact profiles (38.7%), soft profiles (41.8%), and decrement profiles (34.5%).
- 2. The success rate of persons with intact profiles is higher than that of those with zero profiles (35%).
- 3. The success rates of persons with zero and intact profiles, the two profile types believed to have little or no hypnotizability, are both low and differed by only four percentage points.
- 4. The success rate for the special intact profile (68.5%) is higher than that for the regular intact profile (56.5%), consistent with the notion that the special intact profile indicates strong motivation.

These findings support the validity of interpreting the intact profile results as evidence of positive clinical hypnotizability and nonintact and zero profile results as evidence of significantly less usable hypnotizability. Because a number of persons with nonintact and zero profiles responded favorably to treatment, we cannot conclude that these profile types predict an absence of clinical hypnotizability. However, if a clinician has a limited amount of time, the results suggest that the best short-term response is obtained from patients with intact profiles, particularly from those relatively rare people who obtain the special intact pattern.

The soft profile showed such poor reliability (see Tables A–8 and A–9) that, in terms of measurement theory, it should be discarded. Such a recommendation would be based partly on the supposition that a score with such low reliability would also have little validity. Yet Table A–10 indicates that certain interpretations from the soft profile are valid. These seemingly discrepant findings might be integrated in the following way: The soft and decrement personality profiles require failure of the CD and/or Lev item. These items were, respectively, passed by 85% and 73% of the normative clinical sample. Failing one of these items even once during two testings is an unusual occurrence and a significant indication of low hypnotizability.

The second possibility, which cannot be discounted by the present data, is that the "validity" of the soft profile is an experimenter effect.

That is, did patients respond to what may have been the tester's expectation that soft profiles indicate poor clinical response? Neither H. Spiegel nor those who have observed his work can determine any difference in his treatment of patients that might lead to differential outcomes, but this issue awaits more rigorous investigation (i.e., a therapist blind to HIP score). It may be noted here that differential therapist expectations are a potential contaminant of all the data reported in this section.

A second source of data concerning the validity of the HIP as a test of hypnotizability is follow-up information on a group of 178 consecutive flying phobia patients treated with a single 45-minute session involving hypnosis and a problem-solving restructuring strategy described in Chapter 14, Phobias. One hundred fifty-eight (89%) of the patients completed follow-up questionnaires between 6 months and 10.5 years after treatment. Results showed that hypnotizable patients were more than two and one-half times more likely to report some positive treatment impact than those who were found to be nonhypnotizable on the HIP. In addition, the patients' previous experiences with psychotherapy were found to be significantly associated with treatment outcome (D. Spiegel and Frischholz 1981). These findings were replicated in the smoking study (D. Spiegel et al. 1993b).

Validity as a Measure of Severity of Psychopathology

On the basis of the clinical observation that patients with severe psychopathology seem to obtain low (0–6) induction scores and nonintact profile patterns, it appears that the HIP can also be used to identify relatively disturbed patients. A preliminary study (H. Spiegel et al. 1977) was undertaken to evaluate more formally the validity of this inference. Subjects in the study were 105 of 110 consecutive private psychiatric patients who had been administered both the HIP and a battery of psychological tests, including the Wechsler Adult Intelligence Scale and a number of projectives. (The other five patients did not have complete records.) The HIP and the psychodiagnostic examination were always part of the patients' treatment: Neither the patient, the therapist, nor the examining psychologist was aware that the test results would be used for research purposes. The psychologist was also unaware of the patient's HIP scores.

The 105 patients were assigned to one of two groups on the basis of an independent psychiatrist's rating of the psychologists' test reports. The rater was also blind to HIP scores. The first group (N=56)included patients whose psychopathology was rated as mild or moderate neurosis. The second group (N=49) consisted of patients with psychopathology rated as more severe-severe neurosis, probable psychosis, and obvious psychosis. The groups performed on the HIP in the predicted ways, and all predicted differences reached statistical significance: The proportion of the patients with intact profiles who had severe psychopathology was 29% (20/69); the proportion among those with nonintact profiles was 81% (29/36). Low induction scores (0-6) were earned by only 16% (9) of the group with mild to moderate psychopathology, but such scores were earned by 49% (24) of the patients whose psychopathology was more severe. Of the 16 high induction scores (9,25–10.0), 15 (94%) belonged to subjects in the mild to moderate group.

These findings provide clear support for the validity of the HIP as a test of severity of psychopathology. It should be noted that, given the low test-retest reliability of the soft score (see Table A–9), soft and decrement profiles were equally accurate in predicting degree of psychopathology.

There was also an opportunity in this preliminary study to evaluate the meaningfulness of ER. If it is specifically the contrast between positive ER and 0 scores on other items that predicts the presence of severe psychopathology, then—for ER to be meaningful—profile patterns that are the same as nonintact ones in all ways except for zero ER should not show an association with severe psychopathology. This hypothesis was borne out: Only 25% (2) of the patients selected for this second study were rated as showing evidence of severe psychopathology. The difference between this proportion and the 81% of those with nonintact profiles rated as showing relatively severe psychopathology reached statistical significance. Thus, a 0 score on CD and/or Lev predicts severe psychopathology only in the presence of positive ER. In conjunction with the rest of the HIP, the ER sign appears to be useful in predicting the severity of psychopathology.

The following conclusions can be drawn from bringing together the evidence concerning the HIP as a test of hypnotizability and a test of severity of psychopathology. Inferences can be made from the profile pattern concerning both clinical outcome and the presence or absence of severe psychopathology. These inferences are valid in a probabilistic sense for groups, but not for individuals.

Those familiar with statistical analysis of course know this, but it should be pointed out to other test users that the evidence for validity that we have presented does not necessarily mean that any one individual's nonintact profile pattern indicates the presence of severe psychopathology.

The fact that only one of the two types of low hypnotizability, the nonintact profile, predicts severe psychopathology suggests that the profile configuration, for all its complexity, should be retained. It offers something new to the field of hypnosis—the capacity to differentiate two independent sources of low hypnotizability.

The few data available at this point do not indicate that the induction score adds to the predictive power of the profile pattern. However, the evidence is not strong enough to support a decision to discard it. The fact that it is an ordinal scale also makes the induction score amenable to parametric statistical analysis, which is a potential advantage to researchers. Therefore both the profile configuration and the induction score will be retained for the time being.

Discussion

The reliability indices for the induction score, ER, and intact profile patterns are high enough to fall within most test users' limits of acceptability. Reliability of the zero profiles has not yet been adequately tested. Reliability of the decrement profile and particularly of the soft profile is probably not high enough, from a psychometric point of view, to merit their use. However, a mitigating circumstance is that these two profile patterns are valuable in identifying patients whose psychopathology can be characterized as relatively severe.

The profile configuration and the induction score are equally good predictors of clinical outcome in therapy in which hypnosis is used. The profile pattern offers the added advantage of identifying two types of low hypnotizability: one associated with relatively severe psychopathology, as just stated, and one associated with zero ER or, according to the hypothesis, low inborn potential for hypnosis. This finding is evidence that ER is meaningful in the assessment of hypnotizability.

The relationship between ER and usable hypnotizability is not direct—even the correlation between ER and the HIP induction score is low (see Table A–4). Rather, it seems likely that the relationship between scores on tests of hypnotizability and clinical outcome is mediated by ER. This is at least the case for the HIP: Positive CD and/or Lev scores are better predictors of positive outcome when ER is scored positive than when it is scored 0. This indirect relationship may be part of the reason for the negligible correlation recorded between ER and laboratory measures of hypnotizability (Eliseo 1974; Switras 1974; Wheeler et al. 1974). On the other hand, a high correlation between ER and laboratory tests is not to be expected. One of the authors (H. Spiegel 1972), in introducing ER, described it as a "clinical 'soft focus' observation." Given the data collected to date, the description seems accurate.

The distinction between zero ER and nonzero ER appears to be most meaningful. However, we decided to test the possibility that the lack of correlations between ER and other measures might partly be due to not taking the indirectness of the relationship into account. This test could be accomplished by comparing the correlations between ER and induction score in groups with and without severe psychopathology. The correlation should be low or negligible among the "severe" group because people in this group seem to have difficulty in expressing whatever hypnotic potential they do have. That is, induction scores should be low no matter what the score is for ER. However, among the group without severe psychopathology, there should be less interference with expression of potential and thus more relationship between ER and induction score. Of course, the finding that nonintact profiles are more common among people with severe psychopathology led us to expect that our hypothesis would be confirmed. What we did not know was what the magnitude of difference would be. The result was a highly significant association (r=0.52; P<0.001) among the "healthy" group (N=56) and a nonsignificant correlation (r=0.15; P>0.10) among the more disturbed group (N=49). The difference between the correlations was significant (Z=2.3; P<0.05). The two samples were the same ones described by H. Spiegel et al. in 1977.

The age effect observed in the normative data, consistent across all three HIP measures, is notable. What makes this consistency more intriguing is that these findings were wholly unexpected.

This appendix presents the opportunity to gather in one place all standardization data currently available. It is fragmentary in some spots, a regrettable but unavoidable consequence of the fact that some of the most interesting studies are in process. In conclusion,

the encouragement of future research should be underlined in red. Clinical investigation is notoriously difficult because patient care takes priority. Replication of the findings must come from the clinic, but the institution of manipulative designs and control groups, design features we wish we could use but cannot, must come from the laboratory.

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