A CONCEPTUALIZATION OF HYPNOSIS:

EXPLORING THE PLACE OF APPRAISAL AND ANOMALY IN BEHAVIOR AND EXPERIENCE

William B. Plotkin and Wynn R. Schwartz

ABSTRACT

This article introduces a new approach to the elucidation of hypnotic phenomena. Rather than contributing to the ongoing debate as to whether or not hypnosis involves a special psychological state, we develop a "conceptual map" of the subject matter of hypnosis that encompasses both the presently defined "state" and "nonstate" positions without reducing one to the other. We begin by explicitly and systematically articulating, in ordinary observational "action" language, concepts of "psychological state," "trance state," and "hypnotic state." Then, we introduce a concept of "hypnoid behavior" which is distinguished from both hypnotic phenomena and the simulation of hypnosis. The concepts of selected "state" theorists (Ronald Shor, Martin Orne, and Ernest Hilgard) and "nonstate" theorists (Theodore Barber and Theodore Sarbin) are located on the present conceptual map, which demonstrates

Advances in Descriptive Psychology, Volume 2, pages 139–199
Copyright © 1982 JAI Press Inc.
All rights of reproduction in any form reserved.
ISBN: 0-89232-225-X

that these two theoretical positions are not so much in disagreement as they are concerned with different ranges of phenomena. The general logic of "state" concepts in behavioral science is discussed, with emphasis on the use of a "hypnotic state" concept in the explanation of hypnotic phenomena. Finally, the concepts of "suggestibility," "hypnotizability," and other relevant individual-difference concepts are compared and contrasted.

Despite 200 years of research on hypnotic phenomena, the most fundamental issue in the field is no closer to resolution now than it was in 1784 when Benjamin Franklin (representing a scientific commission appointed by the King of France) confidently announced that Franz Anton Mesmer's alleged "animal magnetism" did not exist, and that the effects attributed to this chimerical force were simply the result of imagination and imitation. Of course, the notion of animal magnetism has long since passed into history, but the essential issue, concerning the fundamental nature of hypnosis, remains. In its contemporary form, this issue has found its way to the center of the so-called state-nonstate debate, which focuses on the following question: Does hypnosis involve the induction of a special state of consciousness—a trance state—or can hypnotic phenomena be adequately and fully explained in terms of such familiar psychological processes as imagination, suggestion, and role-playing? In recent years, the debate over this issue has at times become rather heated, with some very articulate and persuasive proponents on both sides (e.g., Barber, 1972; Bowers, 1973, 1976; Chaves, 1968; Coe, 1973; Hilgard, 1969, 1973; Orne, 1959, 1972; Sarbin & Coe, 1972; Spanos, 1970; Spanos & Barber, 1974; Spanos & Chaves, 1970; Tellegen, 1970). However, despite some encouraging recent trends toward empirical and theoretical convergence in hypnosis research (Spanos & Barber, 1974), the state-nonstate debate remains quite unresolved, with vigorous and vocal defenders on both sides apparently prepared to defend their positions until Science's Day of Judgment, when the Divine Debate-Dissolving Datum will presumably be unveiled.

This essay (see also Plotkin & Schwartz, Note 1, Note 2), has been written for those who do not believe in such a day or such a datum, for those who do, but cannot wait that long, and, above all, for those like ourselves (e.g., Bowers, 1976; Gordon, 1969; Orne, 1977; Shor, 1970; Weitzenhoffer, 1962) who have concluded that perhaps the problem is not a lack of data but rather one of confusion stemming from the characteristically ambiguous and equivocal manner in which the issue has been formulated and in which answers have been propounded. We have found that with a clear articulation, the dispute loses its substance—the debate simply dissolves. To be sure, there remains a significant number of empirical issues requiring empirical resolution, but, as will be seen,

these are fundamentally different issues from those currently defined within the state-nonstate dispute.

In short, where there currently appears to be the greatest amount of disagreement among hypnosis researchers, we find the two sides to be in fact speaking past one another and not disagreeing at all. Moreover, this dispute appears to be merely symptomatic of a more pervasive underlying problem. *We see the puzzle as primarily a conceptual one, and only partly and secondarily as a reflection of methodological inadequacy.* In particular, we find that it is entirely possible for a bona fide and respectable concept of "hypnotic state" to exist side-by-side, with such other contemporary conceptions as "believed-in imaginings" (Sarbin & Coe, 1972), "absorption" (Tellegen & Atkinson, 1974), "suggestion-related imaginings" (Spanos & Barber, 1974), "dissociation" (Hilgard, 1974, 1977), and "role-taking involvement" (Sarbin & Coe, 1972), and to do so without the state and nonstate concepts competing with one another, substituting for one another, or getting in each other's way. However, it will take much more than a mere assertion that all these concepts can coexist peacefully. What we propose is a single conceptual system, or conceptualization, which can encompass and sort out both positions within the framework of an integrated set of explicitly articulated concepts. The superstructure of such a system is in fact already in existence, and indeed has been so for over fifteen years, under the title of Descriptive Psychology (Ossorio, 1966, 1969/1978, 1973, 1971/1978). In this paper, we present a small portion of Descriptive Psychology, which is elaborated and adapted where necessary, to provide a framework sufficiently rich and differentiated to allow explicit and systematic conceptual access to the *full* range of facts subsumed under the term "hypnosis."

We will argue that although the theoretical languages and positions of the state and nonstate positions are manifestly contentious, their underlying distinctions are not. However, we will *not* be claiming that the same phenomena can be spoken of in either "hypnotic state" or "imagination" terms as if it were merely a matter of linguistic preference; these are not merely semantic issues, but conceptual ones. Indeed, we hope to demonstrate that there are at least three conceptually distinct—albeit empirically overlapping—sorts of phenomena encompassed under the single label of "hypnosis." A need then arises for a single conceptual system in which these different phenomena can be simultaneously located and differentiated. Correspondingly, there is also an absence of distinct methodologies for *empirically* separating these phenomena. Of course, this is no coincidence. If the distinctions are not clearly articulated, we would expect them to be empirically demonstrable only by accident. The difficulty appears to stem largely from the fact that under the same

conditions (e.g., those of hypnosis experiments), two different types of hypnotic phenomena may occur—one more appropriately spoken of in "special state" language, the other more accurately described in the terms of imagination and role-playing. Proponents of the state and non-state positions tend to see or generate only what their respective theoretical orientations allow or highlight. For the sake of both convenience and heuristics, we will employ the convention of calling the former phenomena by the term "Hypnotic states" or "Trance states," and the latter phenomena by the term "Hypnoid behaviors." Both will be differentiated from sham behavior or playacting, the mere simulation of hypnotic performances. The employment of capital letters is deliberate, and it is crucial that their significance is not misunderstood. They are intended to remind the reader throughout this article that any of our sentences in declarative or propositional form concerning Hypnotic or Hypnoid phenomena is not an empirical assertion or statement about anything, including hypnosis. Rather, they are either articulations (e.g., definitions) of what we *mean* by these words, or they are logical implications or derivations of these concepts. Naturally, before any such implications are articulated, our concepts of "Hypnotic state" and "Hypnoid" will first be very explicitly presented. Subsequently, when we say, for example, that a Hypnotized person (one who is, by definition, in a Hypnotic state) would do such and such in circumstance C, we are not to be taken as hypothesizing or claiming anything or to be "making up facts." Rather, we will simply be saying, "Notice that in these circumstances it is only these sorts of behaviors that *logically* would *be* characteristic of a Hypnotized person, as defined here." Such a presentation is not an assertion of fact, but an illustration of the use of our concepts in the organization, differentiation, and integration of the subject matter of hypnosis. Furthermore, when we employ words such as "hypnosis" or "hypnotic" with lower-case letters, this is also to be taken as deliberate and as indicating that we are referring to either the empirical findings or the historically distinguished and largely undefined subject matter of hypnosis. The significance and intention of our capital letters is solely and precisely to distinguish our concepts of Hypnotic and Hypnoid from any historically or experimentally derived connotations of these terms, although, naturally, our concepts would have no heuristic value if there were not some substantial substantive overlap.

We see our task as similar to the one undertaken by Shor (1970) in a paper concerned with a similar goal:

> Semantic differences aside, it is the writer's belief that present theories of hypnosis seem so divergent because they are touching different sides of the proverbial elephant. . . . In the writer's judgment there are useful distinctions and important insights embedded in most contemporary and even antiquated theories. So the task,

> in metaphor, is not to choose sides, one against another, but to separate the wheat from the chaff. The argument here is not for a superficial eclecticism but rather for a harmonious synthesis. (p. 90)

We are attempting to provide here a common and theoretically neutral language that bridges the apparent gap between the state and nonstate positions, and that includes both.

THE NATURE OF CONCEPTUALIZATION

Since this idea of a theoretically neutral conceptualization will undoubtedly seem unfamiliar, if not specious, to many of our readers, we will clarify this matter before continuing. This is necessary since what we are presenting here is fundamentally different from a theory[1] or a model, and any attempt to treat it as one of the latter will inevitably lead to some critical misunderstandings as to the nature of our formulation.

The most fundamental difference between a conceptualization and what are commonly called theories, hypotheses, and predictions is that, unlike the latter three, a conceptualization does not claim, assert, or deny anything, and nothing is predicted. Rather, its intent is the explicit and systematic delineation of a subject matter—a range of *possible* facts (including established as well as merely possible facts). It articulates a set of concepts that can be used to make distinctions between the sorts of phenomena that make up the subject matter in question—in this case, hypnosis. It is a "map" of possibilities, a conceptual "bookkeeping device." As with the chemist's periodic table, it is a means of locating and sorting possible observations within a given conceptual domain. In essence, the conceptualization from which we are borrowing (Ossorio, 1966, 1969/1978, 1971/1978) is what Walter Mischel (1973) has termed a "grammar of behavior." It is not a preemptive bid at the truth. Rather, our foremost purpose is to provide a set of tools for explicitly and systematically describing, ordering, and categorizing both past and future empirical findings about hypnosis so that, as hypnosis researchers, we can be clearer—in our own minds and in our communications—as to what it is we have empirically discovered and as to precisely how and where we agree or disagree concerning hypnosis.

Conceptualizations are here distinguished from those formulations—be they theories, assumptions, postulates, hypotheses, or predictions—that assert some particular facts and thereby deny other merely possible facts. Theories, hypotheses, and so forth are supposed to be confirmable and hence falsifiable, and must therefore be supported by systematic observations to be acceptable. In contrast, a conceptualization must be *non*falsifiable if it is to serve its purpose of articulating and ordering a full range of possible facts without any bias toward some particular facts,

and without leaving out any possible facts. Thus, it is a misunderstanding to consider testability to be a standard of evaluation of a conceptualization, if one means by "testability" an assessment of truth value. Conceptualizations have no possible truth values. Rather, the criteria for appraising conceptualizations are explicitness, cogency, coherency, comprehensiveness (in giving systematic access to a full range of facts), faithfulness to the traditionally recognized subject matter (not merely to the theories), and, most generally, usefulness in the description and explanation of those facts that make up the subject matter. The major empirical question about conceptualizations concerns the extent of their applicability by different persons. Range of application is not to be confused with truth.

It is imperative, then, that the reader understand that we will not be asserting or proposing anything about hypnosis. (See also Plotkin & Schwartz, Note 1, Note 2.) We will not, for example, claim that hypnotic induction procedures must lead to what we will articulate as "Hypnotic states," or that they usually do, or even that they ever do or have. Rather, we will attempt to explicitly identify the different sorts of outcomes that hypnotic induction procedures logically *could* lead to, including Hypnotic states, Hypnoid behaviors, simulation, and various sorts of nonresponsiveness.

One additional feature of conceptualizations needs to be pointed out here. This is a feature that differentiates conceptualizations from most models as well as most theories. This is the requirement that, in order to accomplish their goal, conceptualizations must be articulated in a terminology that already has an established usage—namely, ordinary observational language. There are three reasons for this. First, this is the only way to have theoretical neutrality. Second, since the adequacy of a conceptualization depends upon its intelligibility and its usefulness in the observation of the relevant phenomena, it must be articulated in terms that require neither further definition nor translation in order to use them observationally.[2] Our best, if not only candidate is ordinary language, as many others have recognized (Bromley, 1977; T. Mischel, 1969; W. Mischel, 1968; Ossorio, 1971/1978). Moreover, ordinary language is no less capable of conceptual precision and rigor than specially contrived technical language (Harré & Secord, 1973; Wittgenstein, 1953).

A third advantage of using ordinary language is that there is no need or place for the familiar sort of operational procedures in the empirical employment of the resulting conceptualization. Indeed, the whole notion of "operational definition" deserves a closer look, since whatever else they might be, operational "definitions" are most certainly *not* definitions (Lieberman, 1977). This is to say that they do not directly explicate the *meaning* of a concept; rather, they only attempt to illustrate or instantiate

the concept's use. For example, operational "definitions" of "hypnotic state" (e.g., what*ever* follows an hypnotic indirection procedure; or what*ever* state a person is in while he responds above a certain arbitrary score on a "hypnotic susceptibility scale") tell us nothing about what we mean by "hypnotic state." What they do tell us is where to look to find—or what to do to generate—an instance of the concept in question (e.g., hypnotic state). However, without an explicit conceptualization, an operationalization fails to accomplish adequately even these latter goals. For we should have to ask ourselves how we would ever know if our operational procedure in fact generated an instance of the concept in question—and not an instance of something entirely unrelated or of something merely related—if we were not already prepared to articulate independently what would *count* as an instance of that concept. Does our operational procedure lead to a hypnotic state just because we say so? How would we know if it didn't? Do we just take this on faith? In short, it should be clear that our capacity to adequately answer empirical questions such as "Do hypnotic induction procedures always, sometimes, or ever lead to a trance state, and, if so, under which circumstances?" requires a prior ability to articulate adequate answers to such *conceptual* (not merely methodological) questions as "What do we *mean* by 'trance state'?" With such a conceptualization in hand, we can then meaningfully design (a) procedures whose goal is to *instantiate*—not (operationally) define—trance states, and (b) procedures by which we can empirically assess whether, in fact, we have succeeded in doing do. The present conceptualization is offered as precisely the sort of formulation that can allow us to appraise the adequacy or success of an instantiation of the hypnotic state. Indeed, it places us in the considerably more powerful position of being able to generate an unlimited set of systematically related instantiations, as illustrated in Plotkin and Schwartz (Note 2).

The distinctiveness of the present approach may best be seen in the shift in the form and nature of the questions that are asked. In the traditional approach there is a quasi-empirical historical question, "What are the historically recognized hypnotic phenomena and means of producing them?" followed by major empirical questions such as "Is there really such a thing as a hypnotic state?" (e.g., Orne, 1972) or "Does hypnosis involve a psychological state distinct from the normal waking state?" (e.g., Barber, 1972). Our major critique of the above approach has been that the fundamental conceptual questions, What do we *mean* by "hypnotic state" and by "psychological state"? are unasked and unanswered, and, therefore, the above empirical questions are indeterminate and unanswerable.

In contrast, in the present approach we begin with these fundamental

conceptual questions, which allows us to develop subsequently both historically faithful and conceptually warranted procedures for assessing, for example, the presence of a Hypnotic state. With these procedures we can then meaningfully answer such empirical questions as (a) "Is person P, at time T, in a Hypnotic state?", (b) "Which procedures are most effective in facilitating the induction of a Hypnotic state with person P?" (c) "Which sorts of interests, abilities, and other personal characteristics of P facilitates his Hypnotizability?" (d) "Which sorts of non-ordinary skills, if any, facilitate the hypnotist's successful employment of induction procedure X?" (e) How frequently, if ever, do standard hypnotic induction procedures result in Hypnotic states in particular populations?" and (f) "In what ways can the induction of a Hypnotic state be of benefit for person P?"

OVERVIEW

In light of these considerations, we will proceed in a manner that is quite distinct from the standard approach to hypnosis and that will not generate the familiar sorts of procedural difficulties. We will begin by articulating the general concept of "psychological state" in the ordinary observational vocabulary of action language (e.g., T. Mischel, 1969; Wittgenstein, 1953). On the face of it, this concept of psychological state encompasses all instances of such states, and articulates the basic rules underlying our attributions of any particular psychological state to an individual.

Second, we will articulate concepts of "Trance" and "Hypnotic state" which are manifestly and unequivocally special cases of the concept of psychological state, so that at this point there will be no possibility for coherently raising a doubt as to whether or not the Hypnotic state is a distinct psychological state.

Third, we will introduce the notion of "Hypnoid behaviors," which will be carefully distinguished from—and compared to—both Hypnotic phenomena and hypnotic simulation. Following this, we will explore some related issues such as (a) the logical place of state concepts in the explanation of hypnotic phenomena, and (b) several different sorts of individual difference concepts relevant to understanding hypnosis.

In a second paper (Plotkin & Schwartz, Reference Note 1) we will illustrate the use of the concepts developed in this essay by employing them to construct descriptions, categorizations, and explanations of (a) hypnotic inductions procedures, and (b) a sample of representative manifestations of the Hypnotic state. The ease with which the concepts presented here can be employed to construct coherent explanations of both historically recognized and contemporary hypnotic phenomena

forms the basis for our identification of the present formulation as indeed a heuristic conceptualization of the subject matter of hypnosis.

Finally, in a third essay (Plotkin & Schwartz, Note 2), we shall present (a) general guidelines for the assessment of the presence and depth of the Hypnotic state, and (b) an explicit instance of such a procedure recently developed and successfully employed in one of our laboratories.

PSYCHOLOGICAL STATES

Curiously enough, in all the contributions to the dispute as to whether or not hypnosis involves a distinct psychological state, there has been virtually no coherent discussion of the logically presupposed issue of just what is *meant* by "psychological state" in the first place. Such an articulation is the task of this first section.

To begin with, by "psychological state" we mean a state of a *person* (Abelson, 1977; Harré & Secord, 1972; Ossorio, 1966, 1973, 1971/1978; Strawson, 1959), not of any merely physiological, mechanical, or information-processing structure. This is not to say that it cannot turn out that certain sorts of, for example, distinctive physiological events occur during psychological states of human beings. But whether or not this is the case is an empirical issue, and has no bearing on the conceptual question of what is meant by "psychological state." In general, we must be careful not to misconstrue psychological states as mental or physical entities or processes. In acting in accordance with this caution, we will of course be following the lead of many others before us (e.g., Ossorio, 1966; Ryle, 1949; Sarbin & Coe, 1972; Wittgenstein, 1953).

The initial move is to see that psychological-state concepts (e.g., angry, afraid, elated, interested, bored, confused, depressed, calm, agitated, relaxed, absorbed, entranced, hypnotized) constitute one set of a larger class of descriptive concepts we have for characterizing persons. This superordinate class we will call "personal characteristics" (PC) concepts. Psychological state concepts are a special subset in that they distinguish a person's characteristics at one time from that *same* person's characteristics at other times, whereas all other PC concepts are used to contrast or compare one person with another person, a group of persons, or a social norm.

The wide variety of PC concepts that distinguish between persons can be encompassed under the two categories of personal powers and dispositions. Briefly, the notion of powers involves what a person is *able* to do, and includes the special cases of abilities (the achievements a person is able to accomplish nonaccidentally), knowledge (the range of concepts and facts he or she is able to act upon), and values (the set

of motivational priorities upon which the person is able to act). The category of dispositions, on the other hand, concerns what a person generally *prefers* or is willing to do, and encompasses such groups of concepts as traits, attitudes, interests, and styles (all of which can be further articulated; e.g., Ossorio, 1969/1978).

Although a particular person can be generally characterized and distinguished from others by reference to his or her normal (baseline) powers and dispositions, there can, of course, be psychological variations within a person. When there is a systematic, meaningful, and identifiable variation of this sort, we speak of psychological states.

Thus, to say that a person is in a particular psychological state is to identify a systematic and significant difference of a particular kind in his or her powers and/or dispositions from what they are when he is not in that state (Ossorio, 1969/1978).

For example, to say that a person is in a state of anger (at X) is to say that he or she is more disposed to act in a hostile fashion toward X than normally. Likewise, to say that a person is in a confused state is to say that the person is less able to understand or recognize his or her circumstances or context, and is less able to act appropriately than at other times.

It is important to emphasize here that the domain of psychological states, which corresponds to the language of powers and dispositions, is logically distinct from the domains of behavior, physiology, or experience. It would be as inappropriate to *define* a psychological state such as trance in terms of particular behaviors or experiences as it would be to define it in terms of particular physiological events. Moreover, as instances of PCs, psychological states are not events or processes that happen over and above behavioral events and processes; neither are they hidden forces that "underlie" or efficiently cause behaviors. Rather, PC concepts are the terms that observer-describers use to characterize persons (not mere bodies or minds) by categorizing the different sorts of patterns of behavior that are characteristic of particular individuals (e.g., Block, 1971, 1977; Bowers, 1977), or of particular persons at particular times (i.e., psychological states). Since, as attributes or standing conditions, they are categorically and logically distinct from occurrences (processes and events), they are conceptually ineligible to serve as antecedent variables. As we will elaborate below (in the section on "The Place of the Hypnotic State Concept"), and as Bowers (1973a, 1976) has pointed out, the hypnotic state is not—logically could not be—something that precedes and efficiently causes hypnotic behavior, as Barber (1964, 1969, 1972), for example, has said (correctly in some cases, incorrectly in others) the state theorists hold. Hypnotic states do not efficiently

cause hypnotic behavior; rather hypnotic behaviors are expressions or manifestations of a particular sort of alteration in the person—in his powers and/or dispositions.

The next step is to explicitly identify the particular sort of alteration in powers and/or dispositions that characterize what we will call Trance states, of which our concept of "Hypnotic state" is a special case.[3]

THE TRANCE STATE

We take it to be self-evident that there are at least the following two criteria of adequacy for a conceptualization of trance: (a) It must be a conceptualization of a *state* and not of an object, process, event, structure, behavior, experience, or (as with operational definitions) a procedure that may merely lead to such a state or that may merely provide the opportunity for the manifestation or assessment of such a state, and (b) it must be a conceptualization of a *psychological* state as opposed to, for example, a physiological, cybernetic, or magnetic state. Our conceptualization is as follows:

A *Trance state* is a psychological state characterized by a significant reduction in the person's power and/or disposition to generate final-order appraisals.

The elements of this definition that will require explication are (a) the concept of final-order appraisal, (b) the notion of significant reduction, and (c) the distinction between accepting and generating appraisals.

Final Order Appraisals

The concept of "appraisal" is central to the understanding of the behavior of persons, and is by no means a special construct tailored only for the explication of Trance states. (Indeed, appraisal is in many ways comparable to attribution, which has been widely adopted and employed in contemporary social psychology; see Harvey, Ickes, & Kidd, 1976, 1978; Jones, Karouse, Kelley, Nisbett, Valins, & Weiner, 1972; Kelley, 1967.) This feature is not incidental, since any formulation of trance that was developed from overly specialized constructs would be unable to effectively integrate the domain of hypnosis with the more general domain of behavior and persons (Gordon, 1969).

To appraise an Element[4] is to assign a value, place, or status to it. An appraisal is an observation or description which carries with it an intrinsic motivational significance, since by assigning a place or status to an Element, it provides one or more reasons for behaving in a particular manner toward that Element. For example, if John appraises a particular hypnotist as someone who can be trusted, this gives John

reason to feel, for instance, that he can speak confidently to the hypnotist and that he need not watch the hypnotic procedures in too much detail. On the other hand, if John appraises the hypnotic situation to be a danger or threat to himself, this observation will give him reason to try to avoid or resist a trance induction. Note that although an appraisal has intrinsic motivational significance, a person may not in fact act on a given appraisal if he has a stronger reason to do otherwise, stemming from other relevant appraisals. In addition, it is important to recognize that the generation of an appraisal is not necessarily a *conscious* process (Langer, 1978) or indeed any kind of process at all (Malcolm, 1971). The making of an appraisal may typically be a nonconscious achievement or event.

Appraisals and Context

As many before us have recognized, to describe or appraise an Element is to assign it a place in a larger domain, to place it within a particular frame or context (Bartlett, 1932; Bertalanfy, 1968; Jenkins, 1974; Kelly, 1955; Mandler, 1975; Neisser, 1967, 1976; Piaget, 1952; Sarbin, 1977; Wittgenstein, 1953). All of an Element's identity, meaning, and significance is contingent upon its place in one or more contexts; all Elements are perceived in terms of their physical, psychological, social, cognitive, and/or linguistic context and not as things-in-themselves. For example, it is now well-recognized that an adequate understanding of any particular behavior ultimately depends upon being able to place it in its social and cultural context—in the social practice, interactional pattern, social group, or form of life in which it has its place or meaning (e.g., Goffman, 1974; Watzlawick, Beavin, & Jackson, 1967; Wilson, 1973; Winch, 1965; Wittgenstein, 1953).

The contexts within which an Element is located may, of course, vary widely in logical type and extensiveness, as do, for example, such contexts as a biological cell, a room, a manuscript, a human relationship, a social episode or social institution, or the "worlds" of biology, mountaineering, business, art, mathematics, or education. However, there is one context in which *all* Elements, by definition, have a place; this is the most inclusive or extensive context—the domain which we will identify here as the "real world." That is, the real world is a limiting case or totality in the sense that it is the final context at which we arrive when we locate an Element's place in more and more extensive contexts. Real world, then, is the category term for the totality that encompasses all Elements and all other contexts. As such, it includes the contexts that we call fiction, hallucinations, fantasy, dreams, and imagination, as well as the contents of these contexts, such as fictional characters, hallucinated objects, and dream images. However, it must be remembered that

the place in the real world of a character of fiction, for example, is *as* a character of fiction, not as a real person. The character of fiction is only a person within the context of the fiction. Thus, all Elements, including imaginary ones, have *some* place in the real world; to identify that place is to identify in *what way* (i.e., under what description) they are real.

The content and organization of the real world may vary from culture to culture, and on a smaller scale, from person to person, within a given culture (Berger & Luckmann, 1966; Watzlavick, 1976), but for each person, the real world is this sort of totality. There are two reasons why we speak of the "real world" rather than simply the "world:" first, in order to contrast what is *actual* for an individual from what is impossible or merely possible for him (which of course must be assessed by means of appraisals), and second, in order to contrast the totality with constituent sub-worlds such as the business world or the world of fiction.

When an individual appraises the place of an Element within this ultimate or logically final context of his real world, he is making the sort of appraisal that we will identify as a *final-order appraisal* (FOA). To appraise an Element to be an X relative to the context of the real world is to appraise it to be a *real* X. A nonreal X is an Element that is appraised to be an X only within a special context, but not in direct relation to the larger context of the real world; implicit or explicit reference to the smaller context must be made to understand this Element's correct real-world description. For example, a piece of cut glass may be a diamond within the context of a theatrical play, but it is not a diamond within the context of the real world—it is not a *real* diamond; rather, in its real-world context, it is a piece of costume jewelry. Thus, to make a FOA of an Element is to decide under what description that Element is real or nonreal. Every identifiable Element has some place in the real world, and thus there is always at least one description under which an Element is a real X, even though this description may be significantly different from the original one (e.g., in the case of illusions or hallucinations). To make a FOA of an Element corresponds either to saying what place the element has in the real world (these we shall call positive FOAs) or to saying what place it does not have (negative FOAs).

We have chosen to identify these appraisals of veridicality as final-order appraisals since the final or conclusive significance of any Element depends upon the place of that Element in the real world. Or put another way, whenever we have a question or doubt about the nature or significance of an Element, we will ask certain questions and, as answers, make certain appraisals of that Element. In the class of such appraisals, the conclusive or final appraisal is whether or not the Element is a real

X: that appraisal makes an ultimate difference in how we *treat* that Element.

Appraisals of Realness and Truth

To be able to appraise that an Element is a real or a nonreal X requires that one know what are the most fundamental relationships that an X has with certain other Elements of the real world—those relationships which most centrally identify it as the sort of Element that it is. It is these sorts of relationships which together define its real-world place; our knowledge of them corresponds to our knowledge of what facts are possible or impossible, likely or unlikely, about an X.

The appraisal of an Element as being real or nonreal corresponds to the appraisal of the *description* of that Element as an X as being true or false. Therefore, appraisals of realness and appraisals of truth are both final-order appraisals.

The behavioral significance of knowing that an Element is a real X is that we then know how to treat it, what to expect from it, and how to act in accordance with it. When there is a question of doubt, the way in which we determine whether or not an Element is a real X is to determine if we can successfully treat it as an X (assuming that we are then in a position to do so). If we can successfully treat it as an X, and if we have no further reason for supposing that it is something other than an X, then the Element is appraised as a real X. (See Brickman, 1978, for a recent related discussion of reality attributions.) Notice that, for person P, what counts as evidence as to whether or not a particular Element can be treated as an X depends upon *P's* concept of X, not the observer's concept. However, persons in the same or similar societies will share the same or similar languages and social practices, and hence, similar concepts and appraisals. We have to be especially careful in appraising another person as "unrealistic" or "in poor contact with reality" (e.g., "schizophrenic") when we have significantly different real-world concepts. Then the pragmatic issue of whether or not a person is realistic boils down to whether or not that person can effectively treat Elements in accordance with his or her *own* concepts and appraisals: Do his or her appraisals "work" for that person? (See also Sarbin & Mancuso, 1980.) This is to point out that acting realistically does not require all persons to view circumstances in the same fashion. Rather, whatever concepts a person employs, the test of his or her real-world contact is whether the person is effective or not. Not all sincere descriptions/observations, even our own, can be effectively acted upon, yet we can tell the difference between those that can and those that cannot unless we are psychotic, in Trance, or in some other way unable to generate effective FOAs.

Since a person who is in a Trance state, as defined here, is one who is relatively nondisposed and/or unable to generate FOAs, he or she will be correspondingly unlikely to distinguish imaginary Xs from real Xs—he or she will be unlikely to notice that an Element described as an X cannot be effectively treated as an X; or, if the person does notice this, he or she will not take that as a basis for seeing that Element as something other than an X.

Self-appraisals

There is a second domain which is, for persons, also a totality or ultimate context. This is the context of the self-concept. Persons' self-concepts are their summary formulation of their own powers and dispositions—of their respective status "or place" in the real world. Simply put, it corresponds to how persons see themselves; it defines or limits what persons feel to be possible facts about themselves. Answers to questions such as "Am I eligible to do that?" or "Could I have done that?" or "What sort of person am I?" are formed in accordance with the self-concept. Since the self-concept is the ultimate context in relation to which we appraise descriptions or possible facts about ourselves, then self-appraisals are also final-order appraisals. As FOAs, self-appraisals establish the reality of ourselves. Although we cannot take the space to expand on this here, it should at least be pointed out that the contexts of the real world and of the self are interdependent—they reflect each other. What a person sees as real, or as possible for him or her to encounter, is limited by his self-concept. Likewise, one's understanding of one's self is constrained by one's understanding of the domain (the real world) in which one has a place. To *be* a person—to have the ability to be aware of one's self—corresponds to being a final-order appraiser, to having a concept of "real," and to knowing oneself as a being-in-the-world (Boss, 1963). However, when a person is in a Trance state, that person is not fully acting upon his or her normal person-status since he or she may be relatively nondisposed or unable to distinguish himself or herself as a *particular* self. At these times, the person's self-concept is relatively inactive, and he or she can entertain facts about him- or herself that he or she may not have been willing to consider otherwise.

FOAs and Episodic Memory

Up to this point, we have identified the real world as simply the most inclusive context. A further way to see what sets off the real world as the one in relation to which appraisals of realness and truth are made is that it is the one that includes the individual and all his or her personal or autobiographical history. This is a logical necessity since, whatever else the real world is, it must include the individual whose real world

it is. The ability to distinguish the real world from other worlds, therefore, requires the ability to identify the historical facts that correspond to one's personal experiences: For any given observer, the real world is "my world." Furthermore, the ability to distinguish one's personal experiences from other, merely possible, experiences is an achievement that requires a special memorial competence, which Tulving (1972) has called "episodic memory":

> Episodic memory receives and stores information about temporally dated episodes or events, and temporal-spatial relations among these events. A perceptual event can be stored in the episodic system solely in terms of its perceptible properties or attributes, and it is always stored in terms of its autobiographical reference to the already existing contents of the episodic memory store. (p. 385)

Thus, the ability to make FOAs depends upon the ability (or abilities) identified as episodic memory, since the making of a FOA requires the identification of one's real-world context which is codified in episodic memory. Therefore, a person in a Trance state, who is relatively nondisposed to appraise Elements relative to the context of the real world, may be expected to show certain deficits in his episodic memory, at least on those tasks in which episodic and semantic memory are most distinct.

The Place of FOAs in Behavior and Experience

It is important to note that simply treating an Element as an X does not require that a positive FOA of X has been made. To the contrary, it is relatively rare that we make FOAs since fundamental issues of veridicality seldom arise and, logically, could not be the rule. As discussed below, it is necessarily the case that most appraisals are not final-order appraisals. FOAs are made only when an Element or description is recognized as *anomalous*. By anomalous we do not mean that the Element is irregular, counterexpectative, or ambiguous, although this may often be the case for anomalies. Rather, when we speak of an Element as being anomalous, we are saying that, under its initial description or observation as an X, it appears to be violating one or more of the fundamental relationships that hold between Xs and other Elements. Anomalous, then, is a different concept from counterexpectative, since under some circumstances an anomalous Element will actually be expected (e.g., a mirage or optical illusion), and an unexpected Element is, of course, not necessarily anomalous. Likewise, an irregularity (e.g., a missing object or an object in the wrong position) is not anomalous if no fundamental relationships are violated by that irregularity. Nor is an ambiguous element anomalous if we have not questioned its realness. An Element is an anomalous X if and only if, *as* an X, it is violating the formal laws that govern the existence of Xs. Thus, the place (use) of

FOAs is in the management of Elements that are recognized to be *out* of place. The rule for normal behavior and observation is that an Element is simply identified as an X, it is treated as a case of an X, and no FOA is made. It is only when we cannot successfully treat an apparent X *as* an X, or when we have reason to believe that such an action will be unsuccessful, that we may generate a FOA.

The reason, then, that FOAs are not generally made is that we do not frequently encounter anomalous Elements. This would logically have to be the general rule since an Element is learned to be an X, in the first place, by virtue of the fact that we *have* been able to successfully treat it as an X in a variety of circumstances and ways. We would not have learned that it was an X otherwise. Thus, from the very fact that we acquired the particular concept of an X that we did, it follows that it is unusual to encounter anomalous Xs. If at a later time we were to frequently encounter anomalous Xs, our concept of X and ways of treating Xs would change to accommodate this state of affairs (cf. Piaget, 1955). Of course, there are individual differences here. Some of us encounter anomalies more often than others. This will reflect our changing circumstances, our learning histories in acquiring particular concepts, and our proneness to certain emotional, pathological, or altered states of consciousness.

However, it is not only that persons differ in their liability for encountering anomalies or in their disposition to appraise Elements as anomalies. It is also the case that some classes of Elements, by their very nature, are more likely to have anomalous instances, or to evoke appraisals of anomaly, across observers. These will be the sorts of Elements that are of relatively great conceptual complexity and which we have less established or dependable means for appraising. The major class of such Elements appear to be those that are uniquely associated with persons.

FOAs in Everyday Life

In particular, it is the *self-presentations* and *interpersonal relationships* of persons that appear to be the most frequent objects of FOAs. For the most part, persons may be pretty much as they present themselves to be. However, as Goffman (1959, 1969) has thoroughly explored, persons are also quite capable of dissimulation, fraud, and deception (even self-deception; see Fingarette, 1969), something of which nonpersons are categorically incapable. That is, it is only persons who can purposely mislead each other as to what is real or true, just as it is only persons who can wonder "Is it real?" or "Is it true?" or "Is it me?" (Arnold, 1969).

If we think about our recent occasions for generating FOAs, most of

us will find them to concern questions about the authenticity or accuracy of another's statements or status claims, or of the nature of a personal relationship. For example, consider those daily experiences of doubt as to whether or not person P really is feeling what he is expressing, whether P is "putting us on" or "presenting a false front," whether P really has the status he is claiming, whether he really has the ability or disposition he is implying, whether he and I really have the relationship he is suggesting, and so forth. These all involve FOA-generation. As Goffman (1969) points out, the generation of FOAs in social contexts can become quite complex, reflexive, and contagious:

> Surely every adult who has had a friend or spouse has had occasion to doubt expression of relationship and then to doubt the doubt even while giving the other reasons to suspect that something is being doubted. (Goffman, 1969, p. 81)

Although social interaction is undoubtedly the most common context in which FOAs are generated (and also the one in which there are the greatest individual differences in power and disposition to generate FOAs), anomalies are also encountered and appraised in other domains. Graham Reed (1972), in *The Psychology of Anomalous Experience*, nicely categorizes, analyzes, and documents numerous sorts of anomalies that occur both within and outside the context of person-perception. Although Reed employs the term anomaly in a way that is somewhat broader than our use (he includes occurrences that are merely "irregular, disordered, or unusual"), his book nevertheless explores numerous examples of what we are here calling anomalies, that is, occurrences that appear to violate fundamental real-world relationships. For instance, FOAs are commonly evoked, either during or after the fact (and either successfully or unsuccessfully), by such phenomena as perceptual illusions (e.g., the classical optical illusions; desert mirages; illusions associated with monotonous sensory conditions such as aviation, watchkeeping, solitary imprisonment, deep-sea diving, polar exploration, and experimental sensory-deprivation; expectancy-related illusions and misidentifications; and pareidolia), hypnagogic and hypnopompic imagery, dreams, hallucinations (both positive and negative, pseudo and functional), doppelgänger (a hallucination of one's "double"), *l'illusion des sosies* (the correct recognition of all the *attributes* of another person without being able to recognize the person as such; that is, the illusion of someone's being an impostor or double), déjà vu and its converse, jamais vu, experiences associated with the blurring of "ego boundaries," depersonalization (those instances in which one "remains aware of his personal identity, but appreciates that his sense of change and unreality is subjective and does not represent any *real* change" (Reed, 1972, p. 127), as in some experiences associated with psychedelic drugs, psychosis, intense emo-

tional reactions, and social stress situations), similar experiences of derealization, and the appraisals of others' delusions (demonstrably false beliefs). In the course of his presentation, Reed (1972) also discusses numerous occasions (Trances) in which the power and/or disposition to generate FOAs is significantly reduced.

The Generation of FOAs

To generate a FOA is to both initiate and make it. This distinction between "generating" and "making" is important since the person in Trance may make appraisals that are initiated or evoked by someone else.

The generation of a FOA can be formally represented as involving three steps or phases: anomaly recognition, evidence gathering, and decision. This is not meant to imply that when a person generates a FOA, it is necessarily the case that he or she sequentially, deliberately, or consciously performs these three steps, but rather that, paradigmatically, FOAs involve these three sorts of achievements. However, in some cases the middle step is left out, and the first and third steps become two perspectives on the same and single event. The first formal phase, the recognition of anomaly, corresponds to the initiation of the FOA. The second phase, evidence gathering, corresponds to the optional process of "reality-testing," the resolution of ambiguity, during which it is determined whether or not the Element in question can be treated as an X, whether in fact it violates the fundamental relationships between Xs and other Elements, and so forth (see Piaget, 1955). Finally, the FOA is made, which corresponds to the decision that "it really is an X, after all" or "it is not an X," or "it is actually a Y."

It is critical to understand that when we speak of a person as making the appraisal that an Element is an X, this is meant specifically to exclude the possibility that he or she is simply pretending that it is an X or merely acting *as if* it had been appraised as an X. To appraise an Element as an X is to genuinely *experience* it as an X. Moreover, a person who appraises an Element as an X will usually treat it accordingly, since appraisals carry with them intrinsic motivational significance. However, there are exceptions here. In some circumstances we will have a sufficiently strong reason to treat an Element as a not-X (and thus pretend) despite the fact that we appraise it to be an X. Therefore, how an Element is appraised and how it is treated are different issues, although they will normally coincide.

How Much is "Significantly"?

We are not being imprecise when we say that a reduction in power and/or disposition to generate FOAs amounts to a Trance state only if it is a *significant* reduction. This language simply embodies three re-

minders. First, the description of someone as being Entranced is an appraisal, not a measurement. There is no getting around the logical requirement that this appraisal must be made by *someone,* and that different observers will sometimes disagree. It is not meaningful to speak of somehow quantifying a conceptualization of a psychological phenomenon in the hope of rendering it more objective. As Harré and Secord (1973) have pointed out, precision in the social sciences does not correspond to accuracy of quantitative measurements (as it does in the natural sciences), but rather to the explicitness and refinement of descriptions and conceptual articulations. Moreover, as Bowers (1977) has recently noted, objectivity in psychology is not to be confused with descriptions of behavior in physical or topographical terms. (See the formulation of the concept of "behavior" by Ossorio, 1973, for what is perhaps the most exceptional instance of precision and objectivity in behavioral science.)

Second, being Entranced is not an all-or-none condition: a person can be more or less Entranced. The phrase "significant reduction" implies a continuum of Trance depth. The depth, or intensity, of a Trance state corresponds to the extent of the reduction in power and/or disposition to generate FOAs. The deeper the state, the more it is the case that the relinquished range of FOAs are fundamental to the individual's concept of self and real world.

Third, when appraising person P's state, the reduction in question is relative to *P's* normal powers and dispositions, not to a social norm or ideal. We can expect that people will differ on this PC dimension, so that strictly speaking we cannot make an adequate determination of the extent to which a person is Entranced unless we know something of that person's normal powers and dispositions (see the section below on individual differences).

None of the above is to be taken as implying that it is neither possible nor desirable to develop objective and precise procedures for increasing the confidence and reliability with which we can appraise the extent that a person is in a Trance state. Indeed, such procedures have already been developed and are to be described elsewhere (Schwartz & Plotkin, Note 2). Rather, the above reminders indicate that the conceptualization of a phenomenon is not the place to speak of specific instantiations of that phenomenon. The conceptualization of Trance must indicate what *all* instances of Trance have in common. It is precisely that feature which allows the conceptualization to be employed in the assessment of its instances in not one, but any, circumstances.

FOAs and Trance

We saw above that only a small minority of the very large number of appraisals we make every day could be final-order appraisals. However,

this is not to imply that the power to make FOAs is of anything less than central and primary importance in being a person and in maintaining a concept of self and real world. Although FOAs are not the rule, persons are normally disposed and able to generate them when they are called for. It is not the constant making of FOAs, but rather the *disposition and power* to generate them, that is the logical requirement for having, achieving, and maintaining a real world and a self-concept. A person who could not generate FOAs when called for would not be able to distinguish between a real world and an imaginary world, or between self and other, and thus would not *have* the concepts of the real world or of self.

Although persons are not always generating FOAs, it is an unusual and striking phenomenon when a person does not generate a FOA *under those circumstances in which he would be expected to,* that is, when an Element is encountered that he would normally appraise as anomalous. When, over a period of time, a person frequently fails to generate such FOAs, he or she is in a Trance state as defined here. The case of the Hypnotic state is one of the clearest exemplars of one of these conditions: The hypnotic situation is precisely one in which there *is* something anomalous about, for example, the hypnotist's descriptions of various Elements (i.e., those descriptions would normally be appraised as false). In fact, it is because many hypnotic subjects either do not generate—or do not appear to generate—the FOAs that they would be expected to, that the hypnotic situation holds the fascination, interest, and entertainment value that it does. However, we are here identifying Trance states (including the Hypnotic state—see below) only with those in which the person does not even *generate* many of the FOAs that we would expect him or her to. The other case (generating them but not acting upon them) is the one which we will speak of below as encompassing both Hypnoid behaviors and simulation, which will be further differentiated.

Individuals manifesting the state we are calling Trance should regularly be observed to handle the realness or truth of the Elements they encounter in an extraordinary fashion: for them, *there are no such issues.* Thus, what may seem astonishing to a nonEntranced observer may appear to be treated matter-of-factly by the person in Trance. What otherwise would be considered as anomalous is acted upon without awkwardness or suspicion. The Entranced individual is simply less likely to make distinctions between what is (for the observer) imagination, on the one hand, and reality, on the other, although the person in Trance can consciously act in relation to both domains. It is not the real world *contents* that are abandoned, but what finally organizes and interrelates them: the real world *context.* Thus, when a person is in Trance, there is a more fluid relationship between remembered, perceived, and imagined Elements—there is a greater range of possibilities that can be freely

considered and acted upon. Trance offers some degree of freedom from normal real-world constraints—a freedom that can enhance creative synthesis—at the cost of a temporary pragmatic ineffectiveness.

In any given instance of Trance, we would not necessarily expect that the total sense of self or of real-world context is abandoned, but rather that the range of FOAs given up will depend upon the depth of Trance, upon the circumstances involved in the induction (including any social relationships involved), and upon the person's other personal characteristics, including other nonTrance features of his or her present psychological state. With this qualification in mind, it appears that the present formulation of Trance encompasses the full range of psychological states historically identified as trance states: those associated with reverie, meditation, hypnosis, hypnagogia, spiritualism, divination, shamanism, fugue, depersonalization, derealization, dissociation, and some psychoses.

To summarize: a person in a Trance state—one who is relatively nondisposed and/or unable to generate FOAs—is a person who is correspondingly nondisposed and/or unable to:

1. recognize anomalies
2. question the realness of distinguished Elements
3. question the truth of distinguished statements
4. act on his self-concept
5. appraise the place of an Element in the contexts of self or real world
6. pay heed to the context that his real world provides for his actions.

SHOR'S "GENERALIZED REALITY ORIENTATION"

In reviewing the relevant literature, there is one previous conceptualization of trance that prominently stands out from the rest in terms of its richness and originality. This is Ronald Shor's (1959, 1961, 1970) work concerning the concept of the "generalized-reality orientation." In this section we will briefly review Shor's concept, and compare and contrast it with the present formulation of Trance. In a later section we will discuss how our concept of *Hypnotic state* (presented below) differs from Shor's (1961, 1970) concept of hypnosis, as well as those of Hilgard (1965) and Orne (1977).

Shor (1959) defines the generalized reality-orientation (GRO) as "a structured frame of reference in the background of attention which supports, interprets, and gives meaning to all experiences" (p. 236). For him, a trance state is "any state in which the generalized reality-orientation has faded to relatively nonfunctional unawareness" (p. 241). At

first glance, this fading of the GRO appears to correspond roughly to a reduction in power and/or disposition to generate FOAs. However, on closer inspection, it turns out that Shor's "GRO relinquishment" encompasses a much more pervasive and general power loss than what we have here articulated as a Trance state. Specifically, Shor's concept of trance corresponds to what we would identify, in our present terms, as a significant reduction in power and/or dispositions to generate *any* kind of appraisal (not simply *final-order* appraisals). That is, for Shor (1959), a trance involves "the loss of self and world *entirely*" (p. 236; our emphasis), not merely "the *merging* of self and world" (p. 236, author's emphasis). For Shor, the GRO is "the whole abstract superstructure of relationships which serves as the foundation for my viewing the world" (p. 237). Hence, the GRO appears to be as global a concept as Kelly's (1955) "personal construct system," Lewin's (1935) "life space," Roger's (1947) "phenomenal field," Piaget's (1955) "universe" or "system of schemata," or what we have here called the person's concept of the real world. Shor (1959) states that the GRO

> does not exist just to test reality. While reality-testing is certainly an important derivation, the conception goes beyond it. The reality-orientation *is* reality, at least in the sense that it is the inner surrogate for reality which the person must have in order to interpret anything (to "test" anything for that matter). All entities and events (self, time, space, purpose) exist for an individual only because they are predicated upon the mobilization of an adequate reality-orientation in which such secondary functions (such as reality-testing and differentiation of self from environment) can exist. (p. 240, author's emphasis)

In contrast, persons in what we have here conceptualized as a Trance state still have the power and disposition to make distinctions and to generate the full range of lower-order appraisals about their world, although since they are in Trance, they will not distinguish that world as their world or as a real (or nonreal) world—they will not distinguish between reality and imagination. The Entranced individual's world is one in which the distinctions "self" and "real" have no place, but it is nevertheless a world in which all other forms of appraisals can and do have a place. In other words, there is not a complete loss of consciousness or of critical awareness as in Shor's "trance."

We do not think that the loss of a cognitive framework as global as that represented by Shor's GRO is what most persons, professionals and laymen alike, have in mind when they think of trance. It is the distinction between final-order appraisals and appraisals in general that is absent in Shor's (1959) formulation, and one that we find to be necessary for the understanding of most states historically identified as trances, including the hypnotic state.

However, in his more recent publications, Shor (1961, 1970) writes of

the GRO in a way that is somewhat different from his initial formulation. For example, in his 1970 paper, he states that

> this wide frame of reference or orientation to generalized reality can fade into the very distant background of our minds so that ongoing experiences are *isolated from their usual context*. When that happens the *distinction between imagination and reality no longer exists for us*. (p. 91, our emphasis)

Contrary to his earlier formulation, Shor here implies that the GRO is not necessary for the making of distinctions, but only for the distinctions between real and not-real. This is more in line with our concept of Trance, but in the very next paragraph of Shor's (1970) paper we find an important distinction nonetheless:

> Trance depth is defined as the extent to which at any given moment in time the true state of affairs is unrepresented in the subject's conscious, phenomenal self-awareness. (p. 91)

Here, then, it appears that Shor is restricting trance experiences to those of *imaginary* states of affairs. In contrast, our concept of Trance does not exclude the *representation* of the "true state of affairs." It is possible (although not necessary) for a person in Trance to be perfectly aware of his or her normal real world; it is just that to the extent the person is aware of the real world he or she is not aware of it *as* real. For example, the person does not distinguish between images and observations of actual objects in terms of their realness; he or she is categorically unconcerned with issues of realness or self so that every distinction is equally real or nonreal. Thus, we are identifying Trance not with a condition in which the person is "completely oblivious to the true reality about him" (Shor, 1970, p. 92), but rather with a condition in which there is an obliviousness to the *issues* of realness, self, or truth. We find this distinction to be crucial since we want to be able to include under the label of Trance behavior those that involve conscious transactions with everyday real-world Elements, including real persons such as hypnotists.

Before going on, we will briefly mention what we find to be some additional differences between the two formulations. First is the fact that our conceptualization in terms of powers and dispositions directly expresses Trance state in the language of psychological states, whereas reality-orientation language is somewhat more abstract and susceptible to equivocation and reification. Second, by speaking in terms of appraisals rather than of orientations we can directly relate Trance to its manifestations in particular Trance behaviors, whereas extra moves are required to connect an orientation change to a particular behavior change.

(Recall that appraisals are on the same level of analysis as behaviors—they are descriptions or observations that connect directly to reasons for actions.) This feature greatly facilitates the explication of particular Trance phenomena (Schwartz & Plotkin, Note 1). Third, by speaking on the more differentiated level of appraisals (in contrast to the relatively global level of orientation), we can easily speak of a loss of specific ranges of FOAs (e.g., those associated with what Wittgenstein, 1953, has termed "forms of life") as opposed to a global loss of FOAs (or reality-orientation). This is important since there will be cases of Trance with which we will want to be able to deal that involve a loss of power to generate only a restricted range of FOAs. Finally, and most importantly, our formulation in terms of appraisals allows us access, on the same integrated conceptual map, to both the sorts of facts involved in Trance (including Hypnotic) behaviors and those involved in Hypnoid and simulation behavior. Thus a rapprochement between the "state" and "nonstate" positions becomes a formal possibility.

THE HYPNOTIC STATE

In order to articulate systematically the range of possible facts that correspond to "Hypnotic state," we will offer a paradigm case formulation of this concept. A paradigm case formulation consists of two components: a paradigm case and a set of permissible transformations. The paradigm case is typically the most general, complex, and/or indubitable instance of the concept in question, while the transformations are permissible ways in which the paradigm case can be altered with the result still being an instance of the concept. Thus paradigm case formulations are a highly effective means of delineating a subject matter consisting of a family of related phenomena that do not have any single set of characteristics in common.

Paradigm case. A Hypnotic state is a Trance state characterized by there being another person (the hypnotist) who (a) facilitates the induction of the state, (b) facilitates the maintenance of the state, (c) becomes highly effective at evoking appraisals for the subject.

Transformations. (1) Eliminate (a) and/or (b) and/or (c), but not all three. (2) Increase the number of hypnotists. (3) Allow the hypnotist and subject to be the same person in different roles or at different times (in which case, it is an auto-Hypnotic state).

Here are a few points about the above formulation that deserve special and immediate emphasis. The first concerns part (c) of the paradigm

case, which corresponds to the traditional notions of suggestion and suggestibility: a successful suggestion is the evocation of a (typically anomalous) appraisal (usually not a *final-order* appraisal; see below). When we speak of a subject as having *accepted* a suggestion, we will mean that the subject has made the corresponding appraisal (not simply acted *as if* he or she has). In the paradigm case of the Hypnotic state, the hypnotist becomes highly effective at evoking appraisals for the Hypnotized subject since (a) during the induction procedure (see Schwartz & Plotkin, Note 1), the hypnotist may have led the subject to believe that the hypnotist has the power to affect the subject's behavior and experience, (b) the subject has partially relinquished his or her self-concept, and has thereby lost some of the reasons that he or she would normally have had to resist the hypnotist's suggestions (reasons for or against certain behavior stem from the person's self-concept), and (c) since paradgimatically, the Hypnotized person is unlikely to generate FOAs of the hypnotist's suggestions, he or she is correspondingly unlikely to question whether the suggested phenomena are possible; that is, the subject is relatively unlikely to question the veridicality of the hypnotist's descriptions of the world, including the hypnotist's description of the subject's behavior. Thus, it is likely that a Hypnotized subject would be able to accept the hypnotist's appraisals and to act in accordance with them, provided that he or she has the relevant competence to perform the particular actions that are suggested.

None of these statements concerning part (c) of the paradigm case is to be taken to imply that the hypnotist acquires "special powers" over the subject. To the contrary, we may more appropriately speak of the subject's exercise of his or her own special power to experience his or her own world in unusual ways. (We shall discuss elsewhere the issue of compulsion and ability to resist hypnotic suggestions; see Plotkin and Schwartz, Note 1.)

Second, note that suggestibility is not a necessary feature of the Hypnotic state (nor is the Hypnotic state necessary for suggestibility; see below). It is possible for a person to give up his or her power or disposition to generate only those FOAs that concern issues of "real-non-real" and "self-not-self" without giving up those that concern issues of "true-untrue," which are the set of FOAs applied to other persons' statements, including the hypnotist's suggestions. Thus, a Hypnotized person may be nondisposed to question the realness of what he or she observes without accepting the descriptions (suggestions) of other persons.

Third, when one or more of the transformations are applied, we still have a case of a Hypnotic state, but not one as representative as the paradigm case.

Fourth, note that as a psychological state, the Hypnotic state is articulated in the language of powers and dispositions and not in terms of (a) any particular behaviors or experiences, (b) the occurrence of any particular type of induction procedure, or even *any* induction procedure, (c) the occurrence of any particular type or class of verbalization by the subject, (d) the detection or occurrence of any type of physiological event or process, or (e) any *particular* sort of relationship with the hypnotist. Rather, the Hypnotic state is here defined in terms of a particular sort of change in power and/or disposition, regardless of how this change comes about, and regardless of the specific behavior and experiences by which it is expressed.

Fifth, note that the issue of which particular behaviors and experiences occur during the Hypnotic state depends upon (a) the subject's personal dispositions and powers, including the subject's abilities, values, and knowledge (or beliefs) about hypnosis, whether acquired extra-experimentally or by means of explicit or implicit suggestion during the hypnotic procedures, and (b) the circumstances of the hypnotic context, including the interpersonal relationships and the hypnotist's suggestions (if any). Finally, note that a person need not know at the time he or she is Hypnotized that he or she is in that state, nor need it be the case that any of the Hypnotic experiences appears to be unusual to the person at the time of their occurrence.

OTHER FORMULATIONS OF THE HYPNOTIC STATE

In this section, we will compare our conceptualization with the formulations of three of the major "hypnotic state" theorists—Ronald Shor, Martin Orne, and Ernest Hilgard. Our goal is to point out some major differences between these approaches and our own and to clarify further our conceptualization in the process.

Shor's Formulation

Ronald Shor (1961, 1970) in his "three-factor theory of hypnosis," does not actually offer a direct conceptualization of the hypnotic state. Instead, he speaks in terms of the related concept of "hypnotic depth," which he defines as a "complex of depth along three conceptually separate dimensions" (Shor, 1961, p. 252): trance, nonconscious involvement, and archaic involvement. Shor's concept of trance depth has already been discussed in an earlier section.

> Depth of nonconscious involvement is defined as the extent to which at any given moment in time the hypnotic experiences and behaviors are executed by the subject

> without conscious intention—i.e., without consciously directed motivation, even seemingly in defiance of it.
>
> . . . Depth of archaic involvement is defined as the extent to which at any given moment in time the subject is expressing attitudes, yearnings, and modes of relating to the hypnotist as if a child toward his parents. (Shor, 1970, pp. 91–92)

Shor's formulation differs from ours in several respects. First, since for Shor "it would be quite misleading . . . to speak of an *overall* depth of hypnosis" (1970, p. 91; our emphasis), then it also becomes quite misleading to speak of a unitary concept of hypnotic state. Indeed, he never does. Hence, this is one clear difference between our formulations. Ours allows us to assess the presence of both a Hypnotic state and Hypnotic depth without losing the capacity to make any of the distinctions encompassed by Shor's formulation. Second, as we have already seen above, his concept of trance depth gets at a somewhat different range of facts than does our concept of Trance; specifically, it excludes the conscious distinguishing of real world Elements.

Third, there is no one-to-one correspondence between Shor's second dimension (nonconscious involvement) and any single feature of our present formulation. There is a complexity in making a comparison here since it appears that this dimension of Shor's formulation encompasses two somewhat different sets of phenomena, both of which have further subdivisions. Table 1 is an outline of our analysis of nonconscious involvement. An in-depth treatment of this feature of Shor's formulation is called for here, since it concerns some of the most central and intractable problems in the exploration of hypnotic phenomena.

The first sense in which Shor employs the notion of nonconscious involvement is represented in the above quote, in which he speaks of experiences and behaviors being executed without conscious intention. This, itself, requires partition into two phenomena for analysis: the nonconscious "execution" of (a) behavior and (b) experiences. First, what does it mean to "nonconsciously execute a behavior"? If it is to perform intentionally an action without being *conscious* of our intention to do

Table 1. Analysis of Shor's "Nonconscious Involvement"

I. Behaviors and experiences executed without conscious intention.
   A. Behaviors
      1. Behaviors appraised by the subject (while they are occurring) as spontaneous or automatic.
      2. Behaviors executed completely out of awareness.
   B. Experiences
      1. The cognitive construction of experiences.
      2. Experiences facilitated by nonconscious goal-directed fantasy.

II. Nonconscious general strivings to be a good hypnotic subject.

so, then Shor's nonconscious involvement encompasses too much. It should be clear to all of us that, relative to the number of behaviors we execute every day, we are very rarely *ever* consciously aware of our intentions to do what we do (indeed, a person who is frequently conscious of his intentions to execute behavior is typically considered to lack spontaneity or to be overly "self-conscious"). On the contrary, it is not our *intentions to behave* that are the typical contents of consciousness, but rather it is the Elements in relation to which we are behaving. (See Plotkin, [1981] for further details.) Hence, we do not think that Shor wants to say that a behavior is hypnotic by his second dimension simply because it is executed without conscious intention to do so. Rather, we believe he has in mind one or both of the following two sorts of unusual (indeed, anomalous) behaviors. First are those intentional behaviors of which we become consciously aware while we execute them but which we consciously appraise to be unintended (this is item IA1 in Table 1). A typical example from the historical domain of hypnosis would be the subject who consciously appraises his arm to be spontaneously or automatically rising— that is, rising without the intention to raise it. This, indeed, is an anomalous experience, but it is important that the reader carefully notice what is anomalous about it. It is not anomalous simply because it is being executed without conscious intention. Rather, what is odd is the combination of two states of affairs: (a) The subject is consciously attending to his behavior of raising his arm (this, itself, is unusual; note how infrequently we are consciously aware of our behavior itself *while* we are executing it.), and (b) from the subject's point of view, this behavior does not appear to be a *behavior* at all—that is, it does not appear to be an intentional action (Ossorio, 1973)—it appears to be a mere movement or occurrence. In short, what is odd is that the subject is consciously appraising as unintended, a behavior that an observer consciously appraises to be an intentional action. Note that this would not happen unless the subject were specifically conscious of his or her action itself. Such a behavior is not necessarily Hypnotic by our present formulation—it may only be what we will formally discuss below as a Hypnoid behavior. (Whether it is one or the other will also be discussed below.) Moreover, and in any case, such behaviors are only a very special instance of what is encompassed by "behaviors executed without conscious intention," since this latter category includes the majority of behaviors both in and out of hypnosis. Thus, we do not think that Shor's formulation is sufficiently precise here.

A second type of behavior which is a special instance of behaviors executed without conscious intention, and which Shor might also have in mind, are those which are executed without any conscious awareness whatsoever—no conscious awareness of the behavior *qua* behavior, of

the intention, or of the Elements in relation to which the behavior is directed (item IA2 in Table 1). Examples from hypnosis are automatic writing (e.g., Hilgard, 1977), and posthypnotic behaviors such as unconsciously touching one's ankle upon a prearranged cue. However, again, what is unusual about these behaviors in hypnosis is not simply that they are completely unconscious, since every day we execute certain behaviors completely unconsciously—behaviors like scratching an itch, twirling a strand of hair, adjusting our posture, smoking a cigarette, tying a shoelace, or sometimes even more complex behaviors such as driving an automobile while only being conscious of, say, a conversation or of a pressing problem. The reader will recognize, of course, that these behaviors are the exercise of "overlearned" skills, or of habits that no longer require any sort of conscious attention for their execution. The odd thing, then, about hypnotic automatic writing or posthypnotic behavior is not simply that they are executed nonconsciously, but that they are either (a) executed in response to a cue explicitly arranged by the hypnotist, or (b) neither "overlearned" nor habitual—they normally *are* executed with conscious attention (not *in*tention) to the task, the objects of the action. (For our exploration of these phenomena see Schwartz & Plotkin, Note 1).

To summarize so far: we find that Shor's formulation of behaviors executed without conscious intention, although including many hypnotic behaviors, nevertheless encompasses far too many others to be a heuristic identification of any dimension of hypnosis. Moreover, it also excludes many behaviors that are commonly considered hypnotic. For example, consider the following hypnotic behavior which is executed with conscious intention (unlike most everyday behaviors). Suppose the hypnotist places a room-temperature wooden rod in the subject's hand and says that it is a heating element which he or she is turning on and making hotter and hotter. Suppose the subject appraises (actually experiences) the rod to be getting increasingly hot, and eventually drops it. The dropping of the rod would be considered to be hypnotic by most persons, but it is fully intentional, and consciously so. The subject is conscious both of what he or she is doing and of why he or she is doing it. As far as the subject is concerned the "heating element" was beginning to burn his or her hand. The reason that the subject is conscious of his or her behavior and intention stems from the fact that the hypnotist has specifically focused the subject's attention there. In any case, the interesting (hypnotic) aspect of this behavior is not whether or not it was executed with conscious intention, but rather the fact that apparently the subject was "fooled" or "deluded" (Orne, 1977; Sutcliffe, 1961) into experiencing (appraising) the rod as hot. Hypnotic behavior of this sort includes those stemming from positive and negative hallucinations (e.g..

brushing away a hallucinated fly, or an hypnotic anaesthesia) and "challenge items", in which the subject is conscious of an intentional and unsuccessful attempt to, for example, bend a hypnotically stiffened arm or open hypnotically stuck or paralyzed eyes. Hence, behaviors of the above sort are not hypnotic by Shor's criteria of "executed without conscious intention."

However, Shor's formulation could be taken to imply that in the case of the challenge items, the behaviors that are nonconsciously executed are not the attempts to perform the challenged behaviors (such as bending the stiffened arm), but rather the simultaneous behavior of, for example, stiffening the arm so that it *is* difficult to bend. Indeed, if the subject *is* keeping his or her arm stiff and is not conscious of this, and if this is the reason the subject cannot bend his or her arm when he or she tries, then this behavior is hypnotic by Shor's definition (although not necessarily by ours—see below). However, this will not help with the positive and negative hallucinations. For example, what behaviors are being nonconsciously executed in the case of the dropped "heating element"?

At this point, Shor might argue that the dropping of the rod was a case of nonconscious involvement not because the *behavior* was executed without conscious intention, but because the *experience* (of heat) was. Now we are on to part IB (Table 1) of our analysis of nonconscious involvement, and we must begin by asking: In what sense is an experience (a distinction or appraisal) ever "executed," whether consciously or otherwise? We will consider two possibilities.

First is the "constructionist" idea that all experiences are "constructed" out of elements of our "cognitive construct systems" (Kelly, 1955; Neisser, 1976; Sarbin, 1977). According to this view, perception and imagination are always the result of active, but usually nonconscious, cognitive processes. In this sense, *all* experiences are executed and usually nonconsciously. If this was what Shor meant by "execution," then we would have to conclude that all of us are hypnotized most of the time. As appealing as this idea may be to some, it clearly encompasses a much larger domain under "hypnosis" than any contemporary student of hypnosis, including Shor and ourselves, would find desirable.

A second (and not mutually exclusive) interpretation of "execution" would correspond to the carrying out of a specific set of sequence of behaviors for the purpose of bringing about a particular experience. Perhaps most experiences can be seen as the achievement of whatever behaviors immediately preceded them, but how often would we say that we engaged in those behaviors specifically for the purpose of having a certain experience at their termination? Certainly there are common instances of such practices, but they are clearly not the rule for everyday

behaviors. In this sense of the word, then, experiences are rarely executed. Nevertheless, there is in fact an instance of this sort of phenomenon that is associated with hypnosis: namely what has recently been termed "goal-directed fantasy" (e.g., Spanos, 1971; Spanos & Barber, 1972), about which we will have much to say below in connection with Hypnoid behaviors. When a person engages in goal-directed fantasy (GDF), he or she imagines those things which, if they were actually to occur, would bring about the desired experience. This may correspond to the sort of thing Shor had in mind when speaking of the "execution of an experience." If so, then Shor would say that it was a case of nonconscious involvement when a person engaged in GDF, or something like it, *without being conscious of doing so,* or at least without being conscious of doing so for the purpose of executing the experience in question (e.g., of the rod being hot). We won't say that such nonconscious GDF is impossible, but it should be pointed out that, given that nonconscious GDF is, by definition, both private and nonconscious, it is problematic to assert that it occurs routinely during hypnosis, especially since there is an alternative way of making sense of such hallucinatory phenomena (e.g., the hallucinated heat). As defined here, the Hypnotized subject (unlike the Hypnoid subject, as we shall see below) need not actively strive to experience the rod as hot (consciously or otherwise) any more than the normally awake person actively strives to experience it as being at room temperature. What needs to be accounted for in the above example is not a nonconscious execution, but rather the fact that the subject is unaware that the rod is not *really* hot. However, this feature is already built into our definition of the Hypnotic state: to be aware that the rod is not actually hot would be to generate a FOA of the hypnotist's statement that the rod *was* hot, and, by definition, it is FOAs that the Hypnotized subject is relatively unable or nondisposed to generate, including FOAs of the hypnotist's appraisals (feature (c) of our definition of the Hypnotic state). Hence, if there is an unresolved question here, it is not "Why does the Hypnotized person experience the rod as hot?" but rather "How in the world does a person get in an Hypnotic state, in the first place?" (see Plotkin & Schwartz, Note 1.)

A second possible meaning of "nonconscious involvement" (Part II of Table 1) which is somewhat different from that discussed above is the following: "The person's set of strivings to be a good hypnotic subject has sunk below the level of conscious awareness and is now functioning nonconsciously" (Shor, 1970, p. 91). Here Shor is not speaking of specific intentions to perform specific behaviors, but rather of the person's overall reasons ("strivings") for participating in the hypnotic interaction. On this point, our concepts overlap. The Hypnotized person,

as a logical corollary of our definition, loses awareness of the fact that he is in a hypnotic context since awareness of that sort of fact is a *final-order* awareness: The hypnotic context (as opposed to its Elements) is the subject's real world context, and as we developed above (p. xx), the person in a Trance is "indisposed and/or unable to . . . pay heed to the context that his real world provides for his actions." Since the subject will not be aware of this context (unless it is pointed out), neither will he or she be aware of the reasons which stem from the context (i.e., "strivings to be a good hypnotic subject"). Thus, to the extent that a Hypnotized subject has reasons for enacting the role of a hypnotized person, it is not those reasons that he will be consciously acting upon when in the Hypnotic state.[5] As Shor (1970) points out in this vein, "hypnosis is not just a consciously deliberate decision to cooperate, not just conscious compliance, but is something more profound" (p. 91).

As for Shor's third dimension, "the depth of archaic involvement," we find this to be more restrictive than is desirable for a general definition of hypnotic state, as well as out of keeping with contemporary understandings of hypnosis (see Sheehan and Perry's, 1976, discussion of "collaborative approaches" to hypnosis research). That is, this sort of parent-child relationship (i.e., regressive) between hypnotist and subject may in fact occur occasionally (or even often) and when it does it may facilitate the induction of a Hypnotic state, but we see no reason why one would want to say that this sort of relationship is necessary for or especially characteristic of a Hypnotic state by incorporating it into one's definition. For this reason, in our formulation we have not specified the hypnotist-subject relationship to be of any particular type. This allows for the possibility of archaic involvement, but does not require it.

Orne's Formulation

Martin Orne (1959, 1972, 1977) is commonly considered to be one of the foremost of the hypnotic state theorists, and, indeed, he has been one of the most articulate proponents and defenders of the notion that hypnosis can involve more than simulation and "mere" imagination. Moreover, he has stated many times that he considers hypnosis to be best explained in terms of psychological states and that the "essence" of hypnosis lies in the "subjective experiences" of the susceptible subject. However, a careful reading of Orne's works on hypnosis shows that he has not offered a formal conceptualization of hypnosis or hypnotic state until very recently (Orne, 1977). In this latest paper, he notes:

> What characterizes the hypnotizable subject is *not* the tendency to comply with any and all requests but rather the *specific tendency or ability to respond to suggestions designed to elicit hypnotic phenomena.* In other words, what strikes the observer

> is the profound change that can apparently be brought about in the *experience* of the hypnotized subject, which suggests that hypnosis must involve some basic and profound alterations. (p. 16, author's emphasis)
>
> In summary, I have tried to define hypnosis as that state or condition in which subjects are able to respond to appropriate suggestions with distortions of perception or memory. (p. 19)

As can be seen here, there are some major differences between Orne's formulation and ours. First, Orne defines the hypnotic state in terms of suggestibility (although not mere compliance), while it has been seen that suggestibility is neither a necessary nor sufficient manifestation of what we are calling the Hypnotic state. Second, Orne's definition does not distinguish between Hypnotic behavior and that which we will articulate below as Hypnoid behavior, both of which may involve distortions of perception or memory and profound changes in experience in the course of (genuinely) responding to suggestions. It is this Hypnotic/Hypnoid distinction that we find to be most crucial for the sorting out of hypnotic phenomena, and the resolution of the state-nonstate dispute. Third, we find Orne's identification of "appropriate suggestions" to be inappropriate for the task of conceptualization. In his article, Orne (1977) identifies the "suggestions designed to elicit hypnotic phenomena" as those found in the "standardized scales of hypnotic susceptibility." In saying this, Orne produces an impure mixture of conceptual and ostensive definition; while we need to know precisely and conceptually what it is about those suggestions that make them hypnotic, Orne only tells us where to find them. In the next section of this paper, we will articulate a concept of hypnotic suggestion in terms of anomaly.

Before this recent paper, Orne's approach had been mostly an atheoretical one, in which he has sought to delineate empirically consequences of hypnotic induction procedures in hypnotically susceptible subjects that cannot be accounted for simply in terms of the subjects' sensitivity to the demand characteristics of the experimental context (Orne, 1959, 1972). The outcome of his intriguing work employing what he calls the "simulating-subject quasi-control group" has been the isolation of several candidates for characterisitc *attributes* or *features* of the hypnotic state. However, Orne would be the first to point out that (a) any differences between simulators and real susceptibles does not necessarily mean that an attribute of hypnosis per se has been isolated (the differences may only be a reflection of personality differences between the two groups, or due to differences in preexperimental instructions; see Sheehan and Perry, 1976); and (b) the identification of such features does not, in any case, constitute an articulation of a *concept* of hypnotic state. This second point concerns the distinction between the behavioral manifes-

tations of a state (i.e., its features) and the state itself (the alteration in powers and/or dispositions). Among the possible "essence" manifestations of hypnosis that Orne and his associates have isolated are "trance logic," source amnesia, high role involvement, responsiveness to post-hypnotic suggestions outside of the experimental context, and randomized order of recall following suggested amnesia. (For a discussion of these phenomena see Plotkin & Schwartz, Note 1.)

Hilgard's Formulation

Ernest Hilgard, in his early work, was also a strong advocate of hypnosis as involving a special state of consciousness—a hypnotic or trance state. However, Hilgard has never offered a formal conceptualization of the hypnotic state per se. He acknowledges a "difficulty of defining hypnosis and of specifying exactly how it differs from other states" (Hilgard, 1965, p. 21). Instead, in his major treatise concerning hypnosis as a special state, Hilgard (1965) lists seven "characteristics of the hypnotic state" by which he hopes to "delineate the state sufficiently to invite its further examination as a field of potentially important psychological inquiry" (p. 21). These seven features are

> subsidence of the planning function, redistribution of attention, availability of memories and heightened ability for fantasy production, reduction of reality testing and tolerance for reality distortion, increased suggestibility, role behavior, and posthypnotic amnesia. (Hilgard, 1965, p. 21)

It is probably clear to the reader already that most of these features, even without elaboration, can be conceptually connected to our definition of Hypnotic state. (See Plotkin & Schwartz, Note 1.) This demonstrates (a) that it is possible to offer an explicit and concise formulation of hypnotic state which systematically integrates a diverse and wide range of facts, and (b) that our present concept of Hypnotic state is heuristically effective at formally accessing at least a major portion of the traditionally recognized subject matter of hypnosis.

In any case, the primary point we wish to make in comparing our present work with that of Hilgard's is that our concept of Hypnotic state cannot be seen as an alternative to his concept of hypnotic state, simply because he has never formally articulated such a concept. This reflects a major difference in our understandings of the role of conceptualization in science, as discussed in our introduction to this article. From Hilgard's, as well as Orne's, point of view, the essential nature of hypnosis (not merely its behavioral manifestations) must be determined empirically; hence, they are understandably reluctant to offer a preempirical conceptual articulation—indeed, this apparently would make no sense to

them. In contrast, we see the task of providing a framework for the location of empirically discoverable facts to be necessarily a nonempirical one, and preferably a preempirical one (Ossorio, 1971/1978). Since an adequate conceptualization is one that provides a framework for all *possible* facts within a given subject matter, there is no need to worry that such a formulation results in an a priori denial or assertion of any particular facts. Moreover, without such a conceptual framework, there is no way to know in what ways, if any, the various empirically discovered facts about hypnosis hold together. Are they manifestations of one or several or *any* unusual psychological states? We trust that the reader sees that there is no hope in answering such questions unless we can preempirically articulate what would *count* as a finding about, for example, the hypnotic state. Moreover, this cannot be adequately accomplished with an ostensive or operational definition or by taxonomically identifying a set of representative hypnotic phenomena, as Hilgard (1973) has offered, since we would still have no identification of what *conceptually* holds all these phenomena together as a single domain. As we will elaborate in a subsequent section, our concept of Hypnotic state, unlike Hilgard's (1973) merely classificatory use of "hypnotic state", can be employed as a component of *explanations* of hypnotic phenomena as well as a formal systematization of the subject matter. (See Plotkin & Schwartz, Note 1, for a discussion of Hilgard's (1977) more recent work on "neodissociation theory.")

HYPNOID BEHAVIORS

Of the several fundamental distinctions within the domain of hypnosis that have not been clearly articulated, perhaps the one whose neglect has resulted in the greatest degree of controversy over matters of both theory and fact is the distinction which we will here identify as that between the Hypnotic state and Hypnoid behavior. Hypnoid behaviors are a special class of behaviors that in one important respect resemble one sort of Hypnotic behavior, but which are, logically, noncharacteristic of Hypnotic states. They are also conceptually distinct from simulation or mere compliance. We propose that the Hypnotic/Hypnoid/simulation distinction prescribes some fundamental changes in the manner in which empirical investigations of hypnosis are carried out. These changes will be delineated below and elsewhere (Plotkin & Schwartz, Note 2).

Before offering a formal definition, let's consider some examples of Hypnoid behaviors, which, to our understanding, are very much more common than Hypnotic behavior during the administration of "hypnotic susceptibility scales" to unselected populations (although the actual frequencies must, of course, be empirically ascertained). Consider the individual who is asked to vividly think of his arm as becoming stiff, rigid,

and unbendable, and in so doing finds that to some degree—from mildly to vividly—he or she is able to *experience* his or her arm as rigid; furthermore, when subsequently asked to bend it, this person genuinely finds it to be somewhat difficult to bend—from just distinguishably more difficult than normal to completely unbendable. Moreover, imagine that during this experience of rigidity and genuine difficulty in bending his or her arm, this individual coincidently appraises either or both that (a) it is odd (anomalous) that the arm should become stiff in this manner, or that (b) his or her arm is not really stiff or difficult to bend, but that he or she is simply *experiencing* it that way for one reason or another. For the purpose of our example, it does not matter whether this individual is delighted and fascinated by this anomalous experience, or whether he or she is frightened, puzzled, or bored by it, or any combination of the above. The important point is that the individual recognizes that this experience *is* anomalous. All other examples of Hypnoid behaviors would take essentially the same form as above, but instead of involving the appraisal of a stiff arm, they might involve the appraisal of an abnormally heavy arm or eyelids, or of fused fingers, paralyzed limbs or vocal cords, or of a "force" between one's hands, or of an arm insensitive to pain, a nose insensitive to smell, vision insensitive to certain objects, or of a "fly" buzzing around one's head. What distinguishes these appraisals and their associated behaviors as Hypnoid rather than Hypnotic is articulated below.

Hypnoid behaviors are here defined as behaviors in which a suggested anomalous appraisal (appraisal number 1) of an Element is made and acted upon with the coincident appraisal (appraisal number 2) by the subject, that either (a) appraisal number 1, (b) the Element, and/or (c) his or her ongoing behavior *is* anomalous.[6]

There are several features of this definition that require discussion. The first concerns appraisal number 2. This is a "meta-appraisal" or second-order appraisal relative to appraisal number 1, but more explicitly and to the point, it is a *final-order* appraisal of appraisal number 1, the Element, and/or the ongoing behavior. It is final-order by definition because appraisal number 2 is an appraisal of an anomaly, and, as we saw above, to see an Element (including an appraisal or behavior) as anomalous is a final-order activity. Appraisal number 1 (e.g., that my arm is stiff, insensitive, spontaneously floating) is not a final-order appraisal, and therefore these sorts of anomalous appraisals can also be characteristic of *Hypnotic* behaviors. (Indeed, their characteristic occurrence in Hypnotic states is precisely what is codified by feature (c) of our above paradigm case formulation of Hypnotic state.) What makes Hypnoid behavior nonHypnotic is the second appraisal, which, being final-order, is by definition not characteristic of an Hypnotic state.

Second, it is crucial that the reader does not misunderstand what we

mean by an "anomalous appraisal" (appraisal number 1). It does not mean "an appraisal of an anomaly," which would be a FOA. Rather, it is an appraisal that is, itself, anomalous. The term "anomalous" here is used precisely in the same way as in the earlier discussion of anomalies. Specifically, an anomalous appraisal made by person P is one that is out of keeping with P's concept of the real world or self (e.g., appraisals that conflict with the fact that my arms are the sort of Elements that are normally bendable, self-controllable, sensitive, and subject to the laws of gravity). When an observer of P (including, possibly, P himself) says that P is engaging in a Hypnoid behavior, he or she is saying not only that P is making an anomalous appraisal, but also that either (a) P recognizes that that appraisal (or the appraised Element) is anomalous, and/or (b) P recognizes that P's ongoing behavior (that which constitutes the acting upon the anomalous appraisal) is anomalous. Notice that in clauses (a) and (b) above we use the word "recognizes" rather than "appraises" since, if it is Hypnoid behavior, then by definition P must be correct (i.e., agree with the observer) that it is an anomalous appraisal.[7]

Third, note that Hypnoid phenomena are, by definition, suggested—either explicitly or implicitly (directly or indirectly). The anomalous appraisal may be evoked either by another person (e.g., a hypnotist, therapist, or group leader) or by the subjects themselves (autosuggestion).

Fourth, note that appraisals or descriptions that are appraised as counterfactual (incorrect) or as counterexpectative (surprising) are not precisely the same set as those that are appraised as anomalous. Sometimes a person will not be in a position to make a correct or expected appraisal (due to a lack of knowledge, lack of skill, or inadequacy of observational position). For example, in the case of the standard optical illusions, incorrect appraisals are often appraised as neither surprising nor anomalous—and, in any case, not Hypnoid since they do not require suggestion. Likewise, note that the anomalous appraisals associated with Hypnoid behavior are not necessarily surprising (given a goal-directed fantasy, for example) nor incorrect (e.g., I may in fact *not* be able to bend my arm). They are anomalous in that they are out of keeping with the person's concept of real world or self.

Fifth, since the making of the Hypnoid anomalous appraisal is out of keeping with the subject's concept of real world or self, its occurrence calls for a special explanation (see the following section). However, the occurrence of the second appraisal involved in Hypnoid behaviors—namely, the FOA of the anomalous appraisal—does not require an explanation because the rule (discussed above) is that persons *are* normally disposed and able to generate FOAs of anomalies; hence, it is not at all surprising that persons would recognize as such their own anomalous appraisals or behaviors. Indeed, it is not the occurrence but the absence of that FOA (e.g., in Hypnotic states) that would call for an explanation.

Sixth, it is important to keep in mind that when we say that a person appraises an Element as an X, we do not merely nor necessarily mean that he or she simply says that it is an X or simply treats it as an X. Rather, it is to be understood as meaning that the person genuinely *experiences* it as an X. Moreover, a person who appraises an Element as an X will also treat it accordingly unless he or she has a stronger reason to do otherwise (stemming from other appraisals). To merely pretend that an Element is an X is to appraise it as a not-X while there is a stronger reason to treat is as an X. In this connection, we should briefly consider the notion of "*as-if* behavior" as it has been applied to the understanding of hypnosis (Sarbin, 1950; Sarbin & Coe, 1972). The phrase "*as-if* behavior" is somewhat ambiguous since it can be taken in two significantly different ways. In both cases, the subject *treats* as a not-X an Element that the observer appraises to be an X. However, in one case, the subject himself does not appraise or experience the Element as a not-X (e.g., as an unbendable arm), rather, he or she appraises it as an X (a bendable arm), but deliberately *acts as if* he or she had appraised it as a not-X, because the subject has something to gain from deception or compliance. In this sense, *as-if* behavior corresponds to simulation, pretense, or sham behavior—mere play-acting. There are no present-day investigators of hypnosis who fail to recognize that simulation can and sometimes does occur during hypnotic procedures. However, they differ widely as to its perceived prevalence (see Sutcliffe's, 1960, discussion of the "credulous" and "skeptical" views of hypnotic phenomena).

On the other hand, when Sarbin speaks of *as-if* behavior, he is not speaking of simulation. Rather, he has in mind the case of a subject who appraises an Element as a not-X and is acting accordingly, while an observer appraises that the Element *is* an X. Once again, the subject is said to be treating an X *as if* it were a not-X, but in this case it is because the subject genuinely *experiences* it as a not-X even though he or she may know (another appraisal) that it must in fact be an X. Coe and Sarbin (1977) have made it abundantly clear that it is in this latter sense that they have spoken of *as-if* behavior as a useful concept for explaining hypnotic phenomena, and thus it is a mistake to take their role-playing position as asserting that hypnotic behavior is a case of faking, dissimulation, deception, or fraud. To the contrary, Sarbin's *as-if* behavior encompasses what we are here identifying as both Hypnoid and Hypnotic suggestibility. The problem with the as-if formulation is that it does not make the distinction between these two forms of suggestibility, which depends upon an additional consideration: When the subject makes a suggested anomalous appraisal which he or she sees *as* anomalous, it is a case of Hypnoid suggestibility. However, in the case of an Hypnotic state, the subject, by definition, is relatively indisposed or unable to

generate FOAs, and therefore is correspondingly unlikely to recognize the anomalous nature of any anomalous appraisals he or she may make.[8] Notice that the *conceptual* distinction between Hypnoid and Hypnotic suggestibility has nothing to do with the presence or absence of a hypnotic induction procedure.

Also, it is important that the reader understand that the manifestations of the Hypnotic state are by no means limited to the making of anomalous appraisals without the awareness of their anomalousness. The act of accepting, making, and acting upon anomalous appraisals (i.e., responding to suggestions) is only one possible manifestation of the Hypnotic state. As many other students of hypnosis have pointed out, the hypnotic state is not simply a matter of hypersuggestibility (Bowers, 1976; Gill, 1972; Hilgard, 1965; Shor, 1961, 1970).

One of the distinguishing characteristics of a Hypnoid behavior is that the person does not immediately act upon his FOA of his behavior, the Element, or of his or her anomalous appraisal. That is, the person acts upon the lower-order anomalous appraisal while suppressing the immediate manifestation of the FOA. It takes a special willingness and skill to refrain from acting on one's FOAs since, being final-order, they normally have motivational priority. In contrast, in the case of the Hypnotized person there *is* no FOA to suppress. He or she not only experiences the non-X Element as an X and treats it accordingly, but there is also no thought at the time that the Element might be something other than an X. This is why it should be possible to have greater suggestibility in the Hypnotic state compared to Hypnoid behaviors. Unlike the Hypnoid individual, the Hypnotized person need not suppress the manifestation of a conflicting FOA. It is this conflicting FOA that can weaken the effectiveness and/or likelihood of the Hypnoid anomalous appraisal.

The reader may wonder how it is possible, in the case of Hypnoid behavior, for a person to be simultaneously appraising an Element to be both an X and a not-X. However, this is not at all paradoxical if we remember that the two appraisals are on different "levels." The first is lower-order while the second is final-order—the person experiences the Element *as if* it were an X, while at the same time recognizing that, in the context of his or her real world, it is not in truth, an X. Thus, the Element in question can be authentically treated as an X, but not as a *real* X. This sort of dual appraisal should not seem unusual since it is the same sort of appraisal often involved in daydreams, fantasy, play, imagination, and the perceptual illusions (except that in these cases the appraisals are usually not suggested and often not anomalous).

In summary, the person engaging in Hypnoid behaviors may be observed to treat certain Elements in unusual or puzzling ways, but he or she is not Hypnotized, since there is not a significant reduction in his

or her power or disposition to generate FOAs. The person's intact power and disposition to generate FOAs is manifested in the recognition that his or her behavior *is* anomalous, that he or she is treating the arm, for example, in an anomalous manner (e.g., as unbendable), and/or that some Element, say an image of a person, is not an *actual* person, even though, in some of its perceptual qualities, it looks like one.

The Evocation of Hypnoid Behaviors

How a person comes to engage in Hypnoid behaviors (i.e., how he comes to make anomalous appraisals without being Hypnotized) is, of course, an empirical question and calls for an explanation. In an excellent review article, Spanos and Barber (1974) have discussed the factors that several groups of investigators have found to "determine responsiveness to suggestions," which includes what we have here identified as Hypnoid behaviors. Spanos and Barber found that

> major theoreticians in the area of hypnosis, regardless of paradigm affiliation, are converging on the conclusion that responding to suggestions involves at least two interrelated factors. The first can be conceptualized as a willingness on the part of the subject to cooperate with the experimenter in fulfilling the aims of the suggestions. The second can be described as a shift in cognitive orientation from an objective or pragmatic perspective to one of involvement in suggestion—related imaginings. The construct *involvement in suggestion—related imaginings* encompasses at least two simultaneously occurring cognitive processes: (a) sustaining and elaborating imaginings that are consistent with the aims of the suggestions and (b) disregarding information that is inconsistent with the aims of the suggestions. (pp. 500–501)

This is a particularly interesting quotation since it encompasses the *possibilities* of both Hypnotic and Hypnoid suggestibility, although this important distinction is not made here or elsewhere in Spanos and Barber's article. Although the "shift in cognitive orientation" to which they refer could be interpreted as a significant reduction in power and/or disposition to generate FOAs (and hence as what we are here identifying as a Hypnotic state), we very much doubt that this is what they had in mind, since as "nonstate" theorists, they are committed to explaining hypnotic behavior in a manner that would not evoke such a radical alteration in a person's fundamental capacities. (If the reader has any doubt as to whether or not FOAs represent a fundamental human capacity, he or she is referred back to our earlier discussion of FOAs.) In any case, consider the possibilities: On the one hand, if they do say that their "shift in cognitive orientation" corresponds to what we have here identified as the Hypnotic state, then we have no difference between the state and nonstate positions, and hence no more dispute. On the other

hand, in the more likely case that this is not what they mean, we then need a more explicit articulation of what they do have in mind (in which case the dispute can equally well be resolved—this time by seeing that the two sides were in fact speaking of different phenomena). In the interests of such a resolution, we offer a nonHypnotic, that is, a Hypnoid—interpretation of their "shift in cognitive orientation." Consider that this shift may only entail what we would call an *enhancement* in disposition to generate *anomalous* appraisals (which is, indeed, a type of shift away from "an objective or pragmatic perspective"). Such an enhancement does not require a Hypnotic state; it only requires a willingness to not immediately *act* upon one's FOAs—a shift away from one's normal policy of giving motivational priority to final-order appraisals. We should not be surprised to find that people differ as to their willingness and ability to accomplish this sort of shift. In any case, it should be clear that it is precisely this sort of shift that would facilitate the occurrence of Hypnoid behaviors. The research reviewed by Spanos and Barber demonstrates just this.

It is also clear why their first factor, willingness to cooperate, would be important in the evocation of Hypnoid behaviors. Consider the typical subject undergoing a test of responsiveness to suggestions. He is asked to think of an X as a non-X, and he immediately generates a FOA: an X is not a non-X. Normally, such a FOA takes motivational precedence over any conflicting lower-order appraisal. Indeed, this FOA gives him a reason not even to try to think of the X as a non-X ("It's non-adaptive! Why *should* I?"). Therefore, the subject who is going to engage in Hypnoid behaviors must have, in addition to the requisite skills, an appropriate reason for reversing what is his normal motivational policy ("If it is not a real X, it is not to be treated as *any* kind of X"). This reason may stem, for instance, from a desire to cooperate with the experimenter, to learn more about hypnosis, to have an interesting experience, and so forth.

Spanos and Barber's second factor, "involvement in suggestion-related imaginings," has appeared in many other forms throughout the history of hypnosis research, including Braid's (1847) "mono-ideism," White's (1941) "monomotivation," Arnold's (1946) "ideomotor behavior," Sarbin's (1950) "*as-if* behavior," Shor's (1959) "temporary orientation to a small range of preoccupations," Sutcliffe's (1965) "vividness of imagery and proneness to fantasy," J. R. Hilgard's (1970) "imaginative involvement," Sarbin and Coe's (1972) "believed-in imaginings," Barber, Spanos, and Chave's (1974) "thinking and imagining with the suggestions," and Spanos' (1971) "goal-directed fantasy." The essential idea behind all these formulations is that anomalous appraisals can be evoked when the subject concentrates upon, intensifies, and/or elaborates his imagi-

native processes in a way that is in accordance with the suggestions of the hypnotist. It is important to recognize that such cognitive processes as "goal-directed fantasy" and "thinking along with suggestions"are not the anomalous appraisals themselves. Rather, they constitute a process of *generating* these appraisals.

An example of such a cognitive process leading to a Hypnoid behavior is as follows: If I repeatedly say to myself that my arm is insensitive, if I "picture" it as separated from the rest of my body, and if I vividly imagine that it is dull, numb, a piece of rubber, an inanimate object without sensations, then I may succeed in actually experiencing (appraising) my arm in that way and treating it accordingly—so that, for example, I may not feel any pain from my arm when it is subsequently dipped into ice-cold water. Being able to succeed at these sorts of exercises appears to be facilitated by certain attention-related (Davidson & Coleman, 1977; Van Nuys, 1973) and imagination-related (J. R. Hilgard, 1970; Tellegen & Atkinson, 1974) skills that are normally distributed in the population. However, as we have emphasized above, a subject need not be in the least bit Hypnotized to successfully generate anomalous appraisals. The individual engaging in Hypnoid behavior is not significantly less able or disposed than normal to recognize anomalies; he or she has not lost contact with his normal contextual sense of self and real world.

In this connection, Spanos and Barber (1974) point out that non-state theorists find it to be "unnecessary and misleading to posit a special or qualitatively different state in order to explain the experiences of good hypnotic subjects" (p. 508). On the one hand, we entirely agree that persons need not be in what we are calling a Hypnotic state in order to generate the anomalous appraisals (and have the unusual experiences) associated with Hypnoid behavior (i.e., "responsivness to suggestions"). However, this leaves entirely untouched the question as to whether or not qualitatively different states do occur during *some* hypnotic procedures. Even when it comes to suggestibility, Hypnoid and Hypnotic phenomena are qualitatively different. In his recent book, Bowers (1976) succinctly points out some of the major differences in manifestation and induction between what we would here identify as Hypnotic versus Hypnoid suggestibility:

> Hypnotic subjects are not actively trying, in any ordinary sense, to behave purposefully in accordance with role requirements (Sarbin, 1950), demand characteristics, or hypnotic suggestions. Instead, suggested events are experienced as *happening to him* in ways that would require active effort to resist. . . . Weitzenhoffer and Sjoberg (1961) are especially clear about this issue. They point out that subjects seen under conditions of waking suggestibility [Hypnoid] tend to experience *themselves* as working to produce the suggested effects. They do so by actively con-

> centrating on the suggestions, repeating them over and over, and so on. However, when these same subjects were hypnotized, they experienced the *hypnotist* as doing all the work while they themselves did nothing. (p. 108)

Bowers concludes that "somehow, an altered state of consciousness helps to create this effortless involvement in the suggested state of affairs" (p. 108). We offer our present formulation of "Hypnotic state" as an answer—as an explication of why it is that the Hypnotized person need not become *actively* involved (on any level) with the suggestions in order to experience in accordance with them.

On a second point we completely agree with Spanos and Barber when they claim that state theorists have been rather vague about what they mean by "hypnotic state", so that it is uncertain what if anything they are saying differently from the nonstate theorists' "involvement in suggestion-related imaginings." It is precisely this sort of ambiguity that we are attempting to clear up with the present conceptualization. We are confident that nonstate theorists such as Barber and Sarbin will agree that what we have here specified as the Hypnotic state is a condition that is significantly different from both sleep and the normal waking state. The question now becomes, "How often, if ever, does it occur?" In another publication (Plotkin & Schwartz, Note 2) we introduce an objective methodology for assessing the presence of Hypnotic states independent of suggestibility, but it should be pointed out here that it is clear to us, both from our recent experience with this methodology and from certain experiential reports from several decades of hypnosis research (reviewed in Bowers, 1976), that it is unquestionable that Hypnotic states can and do occur during hypnotic procedures, although they are less frequent than Hypnoid behavior.

In summary, we believe the above section has demonstrated how anomalous appraisals can be generated and acted upon outside of the Hypnotic state. In essence, Hypnoid behaviors were seen to follow the same logic as any other behavior—we normally treat things in accordance with how we appraise them. The empirical lesson from Hypnoid behaviors is that an Element can evidently be appraised and genuinely treated in very unusual or anomalous ways if, for example, we think along with certain suggestions and imagine vividly enough. (However, see Zamansky, 1977, for an intriguing complication.)

HYPNOID STATES

Observers of hypnotic phenomena may on occasion have reason to speak of Hypnoid *states* as well as behaviors. A Hypnoid state is here defined as a nonTrance state characterized by a significant enhancement of dis-

position and/or power to make anomalous appraisals. Whether we speak of a Hypnoid state or a Hypnoid behavior on any given occasion will depend upon whether we are making a general characterization of the person during a certain time period, in which case we speak of a state, or whether we are referring specifically to a given behavior.

The Induction of Hypnoid States

As with Hypnoid behaviors, it is an empirical question as to how Hypnoid states are brought about. In general, everything that was said above concerning Hypnoid behavior will apply here. However, there is one formulation that is particularly well suited to explaining how an enhanced disposition and/or power to generate anomalous appraisals may come about. This is Sarbin and Coe's (1972) formulation of "role enactment." These authors suggest that the individual in a successful hypnosis experiment enacts what he takes to be the requested or implicitly invited role of hypnotic subject (usually conceived as something on the order of an automaton) and, to the extent that he is willing and able to do this, he finds it permissible to engage in the actions appropriate to this role, such as becoming involved in—and believing in—his imaginings, and to thereby succeed in making certain anomalous appraisals. These authors point out that the extent to which an individual can become involved in enacting the role of a hypnotic subject depends on such factors as (a) the subject's ability to recognize the specific nature of the role assigned by the hypnotist, (b) the degree to which the individual sees the role as one which is a desirable one, (c) the degree to which the individual possesses the skills required to enact the role of a hypnotic subject, and (d) the extent to which the individual is reinforced (especially by the hypnotist) for his or her initial and ongoing role enactments.

We find that Sarbin and Coe's formulation of a person enacting the role of a hypnotic subject, and becoming involved in believed-in imaginings, is a cogent explanation of one way in which Hypnoid states may be induced. Moreover, there is some indirect empirical support for the claim that such hypnotic role enactments may in fact take place (Coe & Sarbin, 1966; Sarbin & Lim, 1963). However, it is also possible that hypnotic role enactment, as defined by Sarbin and Coe, would sometimes lead to *Hypnotic* states. How this would happen is, of course, not explicated by Sarbin and Coe since they eschew a concept of trance. They also do not explicitly make the distinction we are here identifying as that between Hypnoid and Hypnotic, although something like this distinction may be implicit in their continuum of role-taking involvement. (See Plotkin & Schwartz, Note 1 for a discussion of how "hypnotic role enactment" can serve as an Hypnotic induction.)

THE PLACE OF THE HYPNOTIC-STATE CONCEPT IN THE EXPLANATION OF HYPNOTIC PHENOMENA

We have seen that there are at least three distinct types of behaviors associated with hypnosis that require explanation: Hypnotic behavior, Hypnoid behavior, and simulation. We have already reviewed the theories and empirical findings relevant to the explantion of Hypnoid behaviors.

As for the explanation of Hypnotic behaviors, what we have developed so far in this chapter is a concept of Hypnotic state. This concept by itself is not an explanation of anything, rather, it is a tool whose *use* is in the construction of explanations of Hypnotic phenomena. Sometimes we need to remember that concepts do not explain; persons who use them do. In order to construct an empirically warranted explanation of a Hypnotic phenomenon employing the Hypnotic state concept, an observer must have an empirical basis for asserting that the subject is Hypnotized. To say that it must be an empirical basis is simply to say that it must be based on observation. However, given what we have seen to be the possible confusion between Hypnotic, Hypnoid, and simulation phenomena, we will require our observations to rule out any reasonable doubts that the apparent Hypnotic phenomenon is actually a case of one of the latter two. In Plotkin & Schwartz (Note 2), we perform this nonempirical task of constructing a set of procedures for the empirical assessment of the presence of Hypnotic states based upon the conceptualization introduced here.

However, given the *logical* possibility of an Hypnotic state, there are still at least three related *conceptual* issues that first need to be explored: (a) What are the different sorts of ways in which a person might become Hypnotized? How is it that the traditionally recognized hypnotic induction procedures would lead to Hypnotic states, if they would at all? (b) What are the different sorts of ways that a Hypnotic state might be manifested in particular circumstances? How is it that the traditionally recognized hypnotic phenomena would be manifestations of a Hypnotic state, if they would be at all? and (c) What does it mean to be Hypnotizable? What are the other related personal characteristics from which we must be careful to distinguish Hypnotizability?

This last issue we will consider at the close of this essay. Our discussion of the first two issues makes up a second essay (Plotkin & Schwartz, Note 1) which lays the foundation for our third essay (Plotkin & Schwartz, Note 2), a presentation of guidelines for inducing and empirically assessing the presence of the Hypnotic state.

What we will do in the present section is to outline how all of the above questions fit together and to focus on the generic place of a "Hypnotic state" concept in the explanation of hypnotic phenomena.

The primary reminder concerns the status of state concepts. They are not to be thought of as antecedent variables, as some nonstate theorists (e.g., Barber, 1964, 1969) as well as some state theorists (e.g., Hilgard, 1969, 1973) have supposed. As is the case with all personal characteristic (PC) concepts, psychological states are not events or processes, even "internal" ones—they are not occurrences of any sort. Rather, they are conditions, attributes, features, or characteristics of individuals. The relationship between a psychological state and a behavior is of a logically different type than that between an antecedent event and a behavior. In the Descriptive Psychology framework, the logical relations between antecedent events, personal characteristics, and behavior are spelled out explicitly and systematically in the Developmental Schema (Ossorio, 1981, see especially p. 63). One of the reminders embedded in this schema is that the full explanation of any behavior requires that one make reference to both the situation, or circumstances, within which the behavior takes place (which is part of what is usually meant by "antecedent variables"; the other part consists of *prior* circumstances, or history; see below) and the actor's PCs. Knowledge of the circumstances of the behavior allows us to say or explain why that behavior happened *when* it did—it allows us to specify the events, processes, objects, and states of affairs that make up the context within which the behavior is chosen and enacted. Our knowledge of the actor's PCs (including traits, attitudes, interests, values, and psychological state), on the other hand, allow us to say why it was *that* behavior rather than some other—it allows us to explain why the specific circumstances led to the particular behavior that it did (in general, "given *this* kind of person in *those* circumstances, and, yes, *that's* what he *would* do"; Ossorio, 1981, p. 63). Together, a person's PCs and present circumstances give him or her a set of reasons for and/or against engaging in a variety of different actions. The intentional actor chooses that behavior in which he or she has the strongest reason(s) to engage.

It is relevant to note here that it is somewhat misleading to speak of even circumstances (or antecedent variables) as direct *causes* of behavior in the sense of mechanistic cause and effect. Circumstances do not directly cause behavior, but, along with PCs, they provide the reasons for a behavioral choice. Moreover, it is important to note that circumstances and PCs, being of conceptually distinct classes, can logically neither compete with nor substitute for one another in the explanation of behavior. Thus, in the explanation of Hypnotic phenomena, references to antecedent variables can never logically compete with references to PC concepts such as Hypnotic state.

The relationship between PCs and behavior is one of expression, potentiation, or constraint. A person's behavior *expresses* his or her characteristics; his or her characteristics render particular behaviors likely,

possible, or impossible. For example, a person who is Hypnotized (i.e., relatively nondisposed and/or unable to generate FOAs) is thereby one who is likely to respond in accordance with the hypnotist's appraisals, or to be able, when the hypnotist requests, to recall a traumatic memory that was previously inaccessible. In these examples, the Hypnotic state is a PC, and the hypnotist's appraisals and requests are features of the present circumstances. Both states of affairs contribute to the explanation of why the particular behaviors occurred. A change in the nature of either may result in a change in behavior.

This issue is critical since the attempt to categorize and treat the "hypnotic state" as a putative antecedent variable has led to a gross distortion of the possible role of a hypnotic state concept in the explanation of hypnotic phenomena. As Bowers (1976) has noted, "the distinction between trance as a cause of suggestibility and trance as a concomitant is very important to maintain" (p. 96). Bowers (1973a, 1973b, 1976) has critiqued Barber's (1964, 1969) objections to the trance concept as follows:

> The essential inadequacy of Barber's attack on trance flows from his preferred methodology. For Barber, "the main task of science is to specify quantitatively how variations in one or a combination of antecedent variables affect the dependent variables—the behaviors that are to be explained" (Barber, 1969, p. 14). This ultrabehavioristic, input-output view of science can only attribute observed differences in outcome to observed differences in inputs. Since a trance state is a condition of the [person] . . . it is not an . . . input; therefore, it cannot, according to Barber's model, explain outputs. In other words, an input-output model in which behavioral outcomes can be explained only by stimulus antecedents is simply blind to ASCs (Bowers, 1973b). . . . In sum, for Barber to deny the existence of trance on the basis of this input-output model of science is a little like denying the existence of four-inch fish after fishing with a net having five-inch holes. (Bowers, 1976, p. 97)

In this connection, it need be emphasized that the role of PC concepts, such as "Hypnotizable" (see below) or "Hypnotized" is not limited to merely descriptive or classificatory uses, as Hilgard (1973) has argued. Personal characteristics are at least as important in the *explanation* of behaviors as are features of the present circumstances. For example, to point out that a given "behaviorist" chose to write an article eschewing PC concepts because he has the (a) mistaken *belief* that they are mysterious "inner" invisible causes and (b) an *interest* in employing only "observable" causes in his scientific accounts *is* an explanation of that behaviorist's behavior, and one that is in terms of PC concepts. And it is a different explanation than saying he did so because he lacks the *competence* (a PC) to do otherwise, or because he has very high regard (a PC) for his mentor who asked him to write it (that request being a feature of the behaviorist's circumstances). (In a recent exploration of

the relation between science and the real world, Ossorio, 1978, demonstrates more elaborately and elegantly than we can here how the myopic preoccupation with mechanistic cause and effect as the only acceptable explanatory principle has significantly retarded the development of behavioral science.) The major caution concerning the employment of PC concepts such as hypnotic state in the explanation of behaviors is that to *be* explanatory and not merely descriptive, we must explicitly understand and articulate what we mean by these terms: As unspecified and empty "place-holders" they cannot, of course, be explanatory.

One type of behavior that present-day investigators of hypnosis seek to explain is responsiveness to test-suggestions. As is the case with all behaviors, reference to both PCs and present circumstances contribute to the explanation of this phenomenon. Since PCs and present circumstances are of logically distinct types, the present paper, which offers a conceptualization of a PC—the Hypnotic state—does not, and logically could not, contradict (or confirm) the empirical findings of other contemporary investigators to the extent that they have attempted to delineate possible relationships between circumstances (antecedent variables) and the response to test-suggestions (see Spanos & Barber, 1974). However, there is a more important role than confirmation or disconfirmation that the present conceptualization is intended to play vis-à-vis these empirical findings: it can help organize them and put them in perspective. For example, as we have seen, there are at least three significantly different sorts of possible explanations for why a person might respond to test-suggestions (i.e., it is a case of Hypnotic behavior, Hypnoid behavior, or simulation). *Which* of the existing antecedent variables are relevant to the explanation of any particular instance of responsiveness to test-suggestions, then, will to some extent depend upon which one of these three (or more) phenomena is occurring. However, even more important, the explanation of *how* or *why* a particular set of antecedent variables would lead to responsiveness to test-suggestions can only be given in terms of the person's PCs. Although this has not been formally recognized as such, even the explanations of behavioristically oriented researchers such as T. X. Barber reflect this logical necessity. For example, Barber (1972) now evokes such explanatory "mediating variables" as the subjects' "willingness to cooperate." This is a PC concept relevant to the explanation of both Hypnoid and Hypnotic behaviors. However, Barber has not recognized that such states of affairs as willingness are not "mediating events" but characteristics of the responsive person no less than is the Hypnotic state, when present.

Another way in which the present formulation places the empirical findings in perspective is that it allows us to see how any particular

feature of an individual's circumstances can play a very different role in the responsiveness to test-suggestions depending upon whether the responsiveness is a case of Hypnotic, Hypnoid, or simulation behavior. (For example, see Bower's, 1973b, discussion of the different possible roles of demand characteristics.)

In summary, PC concepts are indispensable for explanations of behavior since they allow us to understand (a) *which* features of present circumstances are relevant *when* and (b) *why* and *how* they are relevant when they are. It is now widely recognized that a full explanation of any behavior always involves the identification of three different categories of facts: (a) the person's present PCs, (b) his or her present circumstances, and (c) the behavior itself, including the reasons for its choice (Bowers, 1973a; Endler & Magnusson, 1976; Ossorio, 1969).

If we require, in addition, an explanation of how a person *acquired* his or her present PCs (such as how the person became Hypnotized or willing to cooperate), this explanation, regardless of its particular content, must, logically, make reference to his or her *prior* PCs (e.g., skills and interests) and an appropriate intervening history (e.g., an induction procedure or "task-motivating instructions"). This is the second reminder embedded in the Development Schema (Ossorio, 1981).

When applied to the case of Hypnotic and Hypnoid behavior, the above reminders can be developed into the schematic diagram shown as Table 2, which is a specific instance of the Developmental Schema applied to hypnosis, and which organizes into five categories the different sorts of facts that are potentially involved in the description/explanation of Hypnotic and Hypnoid behavior. We have located on the schema a representative sample of the terms that contemporary investigators employ to identify facts of the different sorts involved in the explanation of these phenomena.

There are actually two parts to this schema. The first, encompassing categories 1, 2, and 3, is employed for constructing explanations of how present PCs relevant to hypnosis (category 3) are acquired, namely, by having the prior capacity (category 1) and the appropriate intervening history (category 2). The second part of the schema, encompassing categories 3, 4, and 5 (all of which involve facts that are contemporaneous with the behavior), is employed for constructing explanations of the Hypnoid or Hypnotic behavior (category 5) by reference to present PCs (category 3) and relevant features of the present circumstances (category 4); namely, "this kind of person acts this way in this kind of situation." Different hypnosis theorists have been concerned with different instances of these five categories, but all of the facts with which they have worked can be located on this schema, which shows the logical relations between them, both inter- and intratheoretically as well as both inter- and intracategorically.

Table 2. Representative Sorts of Facts Involved in the Explanation of Hypnotic and Hypnoid Behaviors

(1) *Prior PCs*
- Hypnotic capacities and abilities (E. Hilgard, 1965)
- Imaginative skills and abilities (J. Hilgard, 1970, 1974; Barber, Spanos, & Chaves, 1974)
- Positive attitudes and expectancies concerning hypnosis (Barber, 1972)
- Dissociative skills (E. Hilgard, 1977; Bowers, 1976)
- Openness to absorbing and self-altering experiences (Tellegen & Atkinson, 1974)
- Role skills (Sarbin & Coe, 1972)
- Role expectations (Sarbin & Coe, 1972)

(2) *Appropriate Intervening History*
- Rapport establishment (e.g., Gill & Brenman, 1959)
- Securing cooperation; removing fears & misconceptions (Barber, 1972)
- Hypnotic induction procedure
- Task-motivating instructions (Barber, 1972)
- Demand characteristics (Orne, 1959)
- Role demands (Sarbin & Coe, 1972)
- Imagination Instructions

(3) *Present PCs*
- In addition to prior PCs:
- HYPNOTIC STATE (Hilgard, 1965; Erickson, Rossi, & Rossi, 1976; Gill & Brenman, 1959; Shor, 1959, 1962; Orne, 1977)
- HYPNOID STATE
- Role-involvement (Sarbin & Coe, 1972)
- Imaginative involvement (e.g. J. Hilgard, 1970)
- Absorbed state
- Relaxed state
- Trusting state
- Dissociated state (E. Hilgard, 1977)
- Willing to cooperate (Barber, 1972)

(4) *Present Circumstances*
- Hypnotist suggestions
- Demand characteristics (Orne, 1962)
- Hypnotist-subject relationship
- Role demands (Sarbin & Coe, 1972)

(5) *Behavior*
- Cognition: imagining and thinking along with suggestions (Barber 1972)
- Motivation:
  - to experience effects
  - to cooperate
- Competencies: various skills depending on behavior
- Performance and Achievement depending on behavior ("consequent variables": Barber, 1969)

The first four categories of the schema have been divided into two rows in order to emphasize that the sorts of facts on the top are non-process states of affairs or conditions (PCs), while those below correspond to occurrences (e.g., antecedent variables). Note that the sorts of facts constitutive of a full description of the behavior itself include specifications of the relevant cognitions (distinctions: both facts and concepts that are acted upon), motivations (states of affairs that are wanted), competence (e.g., skills that are exercised), performance (e.g., movements or posture), and achievement (i.e., result, outcome). The concept of behavior employed here, then, is a concept of *intentional action* (Anscombe, 1966; T. Mischel, 1969; Ossorio, 1973, 1981), something much more complex than the simple notions of "overt behavior," performance, response, or operant. Intentional actors are individuals who make choices that reflect their reasons for action—reasons that are provided by their circumstances and personal characteristics.

The Hypnotic State Concept and Circularity

It has been argued by some theorists that the concepts of hypnotic state and trance have been employed in a trivially circular manner (Barber, 1964, 1969; Sarbin & Coe, 1972). This is done when it is said that you know that a person is hypnotized because he responds to suggestions, and that the reason be responds to suggestions is that he is hypnotized. This is trivially circular if all one means by "hypnotized" is "responding to suggestions." This sort of circularity has, in fact, been a problem in the past since theorists have often used the terms "hypnotic state" and "trance" as empty (content-free) categories, so that it was very vague as to what, if anything, was accomplished with these "special mental state" terms (Spanos & Barber, 1974). However, with an explicitly articulated concept of Hypnotic state, there is no trivial circularity. Then, when we observe someone engaging in unusual behavior and explain this by saying that he is Hypnotized, the explanation is not merely a restatement of the observation nor a reference to suggestibility at all. Rather, it evokes an explicit concept that allows us to integrate and organize our observation with other prior *and* future observations of the person's behavior including, but not limited to, responsiveness to suggestions. If our description of the person as being Hypnotized is empirically warranted, then we would expect to observe additional expressions of his relative indisposition or inability to generate FOAs. If we do, our explanation of the person's behavior in terms of the Hypnotic state concept is supported. (However, notice that it is the explanation of that particular person's behavior that is confirmed or disconfirmed, not the Hypnotic state concept.)

INDIVIDUAL DIFFERENCES IN SUGGESTIBILITY AND HYPNOTIZABILITY

Research in hypnosis has clearly demonstrated that there are very large and enduring differences between persons in suggestibility (Hilgard, 1975), and that suggestibility is only slightly higher following a standard hypnotic induction procedure than following "waking imagination instructions" (Connors & Sheehan, 1978; Hilgard & Tart, 1966). The research may be summarized by saying that it appears that it is more the case that suggestible persons have special abilities to make and act upon anomalous appraisals than it is that hypnotists have special powers to enhance suggestibility, although recent research suggests that it may be possible to enhance a person's suggestibility (e.g., Diamond, 1977; Wickramasekera, 1977). In addition, much research has been carried out attempting to relate individual differences in suggestibility to numerous other personal characteristics, with only modest and recent success (Bowers, 1976; E. Hilgard, 1965, 1975; J. Hilgard, 1970; Tellegen & Atkinson, 1974).

However, whatever has been empirically ascertained concerning individual differences in suggestibility has no necessary reflection upon Hypnotizability, which is a different concept. To our knowledge, the present formulation is the first to explicitly articulate the *conceptual* difference between Hypnotizability and suggestibility. (Many others have said *that* there is a difference, but have not formally stated precisely what that difference is.) Suggestibility is the power to make and act upon suggested anomalous appraisals, while Hypnotizability is the power to relinquish one's power and/or disposition to generate FOAs. There can be different sorts of Hypnotizability corresponding to the different ways in which that power may be relinquished (see our categorization of different sorts of induction procedures in our second paper). Hypnotizability must also be distinguished from one's *disposition* to relinquish one's power to generate FOAs ("Hypnotophobia-Hypnotophilia"?), which may vary independently of Hypnotizability. "Hypnotic *Susceptibility*" is yet a different concept, concerning the inverse of one's power to resist being Hypnotized, which evidently is generally quite high among Hypnotizable persons (Austin, Perry, Sutcliffe, & Yeomans, 1963).

The matter gets even more complex since people may differ as to the strength of their normal (baseline) power and disposition to generate FOAs, a trait we shall refer to as Rationality. There is a very important difference between a person who has the power to relinquish his normally strong final-order perspective (i.e., a highly Hypnotizable person) and one who has a weak power to generate FOAs in the first place (a person of low Rationality—one who is characteristically unable to distinguish

fantasy from reality). However, when the former person is Hypnotized he may be as unlikely to generate a FOA as the latter person in his normal state. As an example, we would expect young children and persons in certain pathological conditions to be low on the Rationality trait (relative to normal adults), and therefore low on Hypnotizability as well (you can't give up what you don't have). A concept of Hypnotic state is not relevant to explaining differences in Rationality between persons, nor is it required to explain differences in suggestibility. State attributions must always be reserved for alterations relative to the individual's own baseline powers and dispositions. With few exceptions, existing studies of individual differences in suggestibility and "hypnotic susceptibility" have not distinguished between the traits of suggestibility, Rationality, and Hypnotizability. We suspect that much of the difficulty and complexity that have been encountered in relating suggestibility to other individual differences centers around this problem.

If we now consider just the trait of Hypnotizability (the capacity to relinquish one's final-order perspective), we can recognize immediately that people would be expected to vary widely on that dimension and that there should be all sorts of other skills and dispositions that have empirically ascertainable relationships to it. For example, people should differ not only in their desire and abilities to temporarily give up their final-order perspective, but also in their capacity for being shown *how* to do so by a variety of different means. We would expect that there are many persons for whom it is a delight to give up their disposition to generate FOAs. Much like play, the experiences that occur can be seen as intrinsically satisfying. An Hypnotic experience of floating through clouds may be reason enough to actively seek out such a state. For others, "relief" may be an appropriate reason: relief from the burden that their real world incurs. Yet for others, the giving up of their final-order perspective may be threatening, difficult, or simply not in accordance with their self-concept. Some persons more than others are preoccupied with reality checks and issues of self-control.

We would also expect that some of the skills and dispositions that have been found to be associated with "hypnotic susceptibility" would also be relevant to Hypnotizability, depending on the form of induction procedure employed. These relevant personal characteristics would include imaginative and dissociative skills and others listed in Table 2. As an example, Coe (1964) has found in several studies that drama students score higher on suggestibility scales than do engineers. J. Hilgard (1970) reports a similar difference between humanities majors and social science students. We would expect these differences to hold up for Hypnotizability. Since many drama students are experienced in what Sarbin and Coe (1972) term "engrossed acting," which may involve the relinquishment of the final-order perspective, it would not be surprising if they

sometimes made good Hypnotic subjects. On the other hand, engineers and social science students may be more concerned with reality checks, and may be reluctant to give them up. The world for many engineers is of a certain sort, and the final-order appraisal of whether and how an Element has a place in that world is his stock in trade.

SUMMARY

An attempt has been made here to clarify hypnotic phenomena by focusing on the "state" and "nonstate" positions that various theorists have attacked, claimed, and defended. Our position in regard to this debate is to argue that the central problem is conceptual rather than empirical. We demonstrate that because various theorist-researchers see their task as primarily empirical demonstration rather than conceptual clarification, they have been talking past each other and about different subject matters.

Rather than contributing to the ongoing debate as to whether or not hypnosis involves a special psychological state, we proceed by developing a conceptual map of the subject matter of hypnosis that encompasses both of the historically defined state and nonstate positions without reducing one to the other. The conceptualization we offer rests centrally on our systematically and explicitly articulating the status of appraisal and anomaly in behavior and experience. Three possibilities are presented that correspond to the possible ways a person could encounter an anomaly and/or behave anomalously. These possible ways of acting are described through the use of the concepts of *Trance state* or *Hypnotic state*, *simulation*, and *Hypnoid behaviors* or *Hypnoid state*.

The concepts of selected state theorists (Ronald Shor, Martin Orne, and Ernest Hilgard) and nonstate theorists (Theodore Barber, and Theodore Sarbin) are located on the present conceptual map, demonstrating how these two theoretical positions are not so much in disagreement as they are concerned with different ranges of phenomena.

Following from and supporting our conceptualization, the general logic of state concepts in psychology is reviewed with a focus upon the use of the Trance state concept in the explanation of hypnotic phenomena. Finally, the concepts of suggestibility, hypnotizability, and other pertinent individual-difference concepts are discussed.

ACKNOWLEDGMENT

This chapter represents a portion of a book by the same authors, entitled *A New Look at Hypnosis*, which has been submitted for publication. Requests for reprints of this chapter should be addressed to William B. Plotkin, 1215 Florida Road, Durango, Colorado 81301.

NOTES

1. The term "theory" has, of course, been employed by scientists and philosophers in numerous ways with varying degrees of overlap in meaning. Some of these uses of "theory" are closer to what we are here referring to as "conceptualization" than others. However, there is no need for dispute on this point. What is important is that the reader understands what we mean by "conceptualization" and how it contrasts with the particular use of "theory" we are here discussing. If the reader's understanding of our concept of "conceptualization" corresponds to his understanding of "theory." so much the better. As in the rest of this article, our concern here is with the conceptual, not the semantic, issues.

2. An example from the hypnosis literature of a formulation in nonobservational language that requires further definition and translation is the psychoanalytic definition of hypnotic state as "a regression in the service of the ego" (Gill & Brenman, 1959). Before such a concept can be observationally employed, we require an ordinary language translation of "regression" and "ego."

3. Trance states are a member of a special class of psychological states commonly termed "altered states of awareness" or "special states of consciousness." We cannot take the space here to offer an explication of these latter concepts, but the interested reader is referred to Plotkin and Schwartz (Note 3) where this task is accomplished.

4. Please note that "Element" is a general term that we will use to encompass the four more specific possibilities of objects, such as a house; processes, such as the construction of a house; events, such as the completion of a house; and states of affairs, such as the fact that I built the house or that it is an A-frame.

5. Although we do not have the space to elaborate upon this here, it should at least be pointed out that, in contrast to Shor, we do not see it as necessary that the Hypnotized subject is acting even *non*consciously on these reasons for enacting a hypnotic role. Indeed, our concept of Hypnotic state does not require that the Hypnotized person even *have* these reasons for enacting a role (as opposed to having them and not acting upon them). Although they are most likely very atypical cases, Erickson (1959) illustrates how that which we are here calling Hypnotic states can be, with the appropriate techniques, induced in persons who at no level desire to be good hypnotic subjects (in fact, they may be actively striving to resist becoming hypnotized). However, once they are Hypnotized, these strivings, too, become both nonconscious and, for the most part, nonfunctioning.

6. We take our present formulation of Hypnoid behavior to correspond to the domain of facts commonly referred to as "waking suggestibility" (e.g., Evans, 1967; Weitzenhoffer & Sjoberg, 1961).

7. If an observer other than P does not see it as an anomalous appraisal while P does, then the observer would not call it a Hypnoid behavior; rather, he would call it a perceptual illusion if most persons in their normal state see it the same way as P, or else some sort of psychotic episode (e.g., derealization or depersonalization) since in this latter instance it would be a case where, from the observer's perspective, P does not recognize some normal feature of himself or his world (i.e., P appraises as anomalous what he normally appraises as ordinary and familiar). Of course, if P himself is the observer, then there is no difference between "recognize" and "appraise" in the above clauses. Also, it is important to remember that the observation by someone other than P that P is correct or not correct concerning the anomalousness of his own appraisals is itself an appraisal on the observer's part, and that appraisal is also open to criticism. This is especially important to remember when the observer in question is a mental health professional, whose appraisals have the greatest significance concerning P's future (Sarbin & Mancuso, 1980).

8. These considerations reveal an interesting resemblance between our formulation of the Hypnotic state (and its distinction from Hypnoid) and Jaynes's (1976) recent discussion of hypnotic behavior as the " 'as if' with a suppression of the 'it isn't,' " that is, an anomalous appraisal of X without a (negative) FOA of X.

REFERENCE NOTES

1. Plotkin, W. B., & Schwartz, W. R. A conceptualization of hypnosis. II: Hypnotic induction procedures and manifestations of the hypnotic state. Submitted for publication.
2. Plotkin, W. B., & Schwartz, W. R. A conceptualization of hypnosis. III: Assessing the presence of the hypnotic state. Submitted for publication.
3. Plotkin, W. B., & Schwartz, W. R. A conceptualization of altered states of consciousness. In preparation.

REFERENCES

Abelson, R. *Persons: A study in philosophical psychology*. London: Macmillan, 1977.

Anscombe, G. E. M. *Intention*. Ithaca, NY: Cornell University Press, 1966.

Arnold, M. B. On the mechanisms of suggestion and hypnosis. *Journal of Abnormal and Social Psychology*, 1946, *41*, 107–128.

Arnold, M. B. Human emotion and action. In T. Mischel (Ed.), *Human action: Conceptual and empirical issues*. New York: Academic Press, 1969.

Austin, M., Perry, C., Sutcliffe, J. P., & Yeomans, N. Can somnambulists successfully simulte hypnotic behavior without becoming entranced? *International Journal of Clinical and Experimental Hypnosis*, 1963, *11*, 175–186.

Barber, T. X. "Hypnosis" as a causal variable in present-day psychology: A critical analysis. *Psychological Reports*, 1964, *14*, 839–842.

Barber, T. X. *Hypnosis: A scientific approach*. New York: Van Nostrand-Reinhold Co., 1969.

Barber, T. X. Suggested ("hypnotic") behavior: The trance paradigm versus an alternative paradigm. In E. Fromm & R. E. Shor (Eds.), *Hypnosis: Research developments and perspectives*. Chicago: Aldine-Atherton, 1972.

Barber, T. X., Spanos, N. P., & Chaves, J. F. *Hypnotism, imagination, and human potentialities*. Elmsford, NY: Pergamon, 1974.

Bartlett, F. C. *Remembering*. Cambridge, England: Cambridge University Press, 1932.

Berger, P., & Luckmann, T. *The social construction of reality*. New York: Doubleday, 1966.

Bertalanffy, L. von. *General systems theory*. New York: George Braziller, 1968.

Block, J. *Lives through time*. Berkeley, CA: Bancroft Books, 1971.

Block, J. Advancing the psychology of personality: Paradigmatic shift on improving the quality of research. In D. Magnusson & N. S. Endler (Eds.), *Personality at the crossroads: Current issues in international psychology*. Hillsdale, NJ: Erlbaum, 1977.

Boss, M. *Psychoanalysis and daseinsanalysis*. New York: Basic Books, 1963.

Bowers, K. S. Situationism in psychology: An analysis and a critique. *Psycholoical Review*, 1973, *80*, 307–336. (a)

Bowers, K. S. Hypnosis, attribution, and demand characteristics. *International Journal of Clinical and Experimental Hypnosis*, 1973, *21*, 226–238. (b)

Bowers, K. S. *Hypnosis for the seriously curious*. Monterey, CA.: Brooks/Cole Publishing Co., 1976.

Bowers, K. S. There's more to Iago than meets the eye: A clinical account of personal consistency. In D. Magnusson & N. S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology*. Hillsdale, NJ: Erlbaum, 1977.

Braid, J. Facts and observations as to the relative value of mesmeric and hypnotic coma, and ethereal narcotism, for the mitigation or entire prevention of pain during surgical operations. *Medical Times*, 1847, *15*, 381–382.

Brickman, P. Is it real? In J. Harvey, W. Ickes, & R. Kidd (Eds.), *New directions in attribution research* (Volume 2). Hillsdale, NJ: Erlbaum, 1978.

Bromley, D. B. *Personality description in ordinary language*. New York: Wiley, 1977.
Chaves, J. F. Hypnosis reconceptualized: An overview of Barber's theoretical and empirical work. *Psychological Reports*, 1968, *22*, 567–608.
Coe, W. C. Further norms on the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis*, 1964, *12*, 184–190.
Coe, W. C. Experimental designs and the state-nonstate issues in hypnosis. *American Journal of Clinical Hypnosis*, 1973, *16*, 118–128.
Coe, W. C., & Sarbin, T. R. An experimental demonstration of hypnosis as role enactment. *Journal of Abnormal Psychology*, 1966, *71*, 400–406.
Coe, W. C., & Sarbin, T. R. Hypnosis from the standpoint of a contextualist. *Annals of the New York Academy of Sciences*, 1977.
Connors, J. R., & Sheehan, P. W. The influence of control comparison tasks and between—versus within—subjects effects in hypnotic responsivity. *International Journal of Clinical and Experimental Hypnosis*, 1978, *26*, 104–122.
Davidson, R. J., & Coleman, D. J. The role of attention in meditation and hypnosis: A psychobiological perspective on transformations of consciousness. *International Journal of Clinical and Experimental Hypnosis*, 1977, *25*, 291–308.
Diamond, M. J. Hypnotizability is modifiable: An alternative approach. *International Journal of Clinical and Experimental Hypnosis*, 1977, *25*, 147–166.
Endler, N. S., & Magnusson, D. Toward an interactional psychology of personality. *Psychological Bulletin*, 1976, *83*, 956–974.
Erickson, M. H. Further clinical techniques of hypnosis: Utilization techniques. *American Journal of Clinical Hypnosis*, 1959, *2*, 3–21.
Erickson, M. H., Rossi, E. L., & Rossi, S. *Hypnotic realities: The induction of clinical hypnosis and forms of indirect suggestion*. New York: Irvington Publishers, 1976.
Fingarette, H. *Self-deception*. New York: Humanities Press, 1969.
Gill, M. M. Hypnosis as an altered and regressed state. *International Journal of Clinical and Experimental Hypnosis*, 1972, *20*, 224–237.
Gill, M. M., & Brenman, M. *Hypnosis and related states: Psychoanalytic studies in regression*. New York: International Universities Press, 1959.
Goffman, E. *The presentation of self in everyday life*. New York: Doubleday, 1959.
Goffman, E. *Strategic interaction*. Philadelphia: University of Pennsylvania Press, 1969.
Goffman, E. *Frame analysis*. Cambridge, MA: Harvard University Press, 1974.
Gordon, J. E. Introduction. In J. E. Gordon (Ed.), *Handbook of clinical and experimental hypnosis*. New York: Macmillan, 1967.
Harré, R., & Secord, P. F. *The explanation of social behavior*. Totowa, NJ: Littlefield, Adams, & Co., 1973.
Harvey, J. H., Ickes, W., & Kidd, R. F. (Eds.) *New directions in attribution research* (Volume 1). Hillsdale, NJ: Erlbaum, 1976.
Harvey, J. H., Ickes, W., & Kidd, R. F. (Eds.), *New directions in attribution research* (Volume 2). Hillsdale, NJ: Erlbaum, 1978.
Hilgard, E. R. *Hypnotic susceptibility*. New York: Harcourt, Brace, & World, Inc., 1965.
Hilgard, E. R. Altered states of awareness. *Journal of Nervous and Mental Diseases*, 1969, *149*, 68–79.
Hilgard, E. R. The domain of hypnosis. *American Psychologist*, 1973, *28*, 972–982.
Hilgard, E. R. Toward a neo-dissociation theory: Multiple cognitive controls in human functioning. *Perspectives in Biology and Medicine*, 1974, *17*, 301–316.
Hilgard, E. R. Hypnosis. *Annual Review of Psychology*, 1975, *26*, 19–44.
Hilard, E. R. *Divided consciousness: Multiple controls in human thought and action*. New York: Wiley, 1977.
Hilgard, E. R., & Tart, C. T. Responsiveness to suggestions following waking and imag-

ination instructions and following induction of hypnosis. *Journal of Abnormal Psychology,* 1966, *71,* 196–208.

Hilgard, J. R. *Personality and hypnosis: A study of imaginative involvement.* Chicago: University of Chicago Press, 1970.

Hilgard, J. R. Imaginative involvement: Some characteristics of the highly hypnotizable and the non-hypnotizable. *International Journal of Clinical and Experimental Hypnosis,* 1974, *22,* 138–156.

Jaynes, J. *The origins of consciousness in the breakdown of the bicameral mind.* Boston: Houghton Mifflin, 1977.

Jenkins, J. J. Remember the old theory of memory? Well, forget it! *American Psychologist,* 1974, *29,* 785–795.

Jones, E. E., Karouse, D. E., Kelley, H. H., Nisbett, R. E., Valins, S., & Weiner, B. *Attribution: Perceiving the causes of behavior.* Morristown, NJ: General Learning Press, 1972.

Kelly, G. A. *The psychology of personal constructs.* New York: Norton, 1955.

Kelley, H. H. Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska symposium on motivation.* Lincoln, NE: University of Nebraska Press, 1967.

Langer, E. J. Rethinking the role of thought in social interaction. In J. Harvey, W. Ickes, & R. Kidd (Eds.), *New directions in attribution research* (Volume 2). Hillsdale, NJ: Erlbaum, 1978.

Lewin, K. *A dynamic theory of personality.* New York: McGraw-Hill, 1935.

Lieberman, L. R. Hypnosis research and the limitations of the experimental method. In W. Edmonston (Ed.), *Conceptual and investigative approaches to hypnosis and hypnotic phenomena.* New York: New York Academy of Sciences, 1977.

Malcolm, N. The myth of cognitive processes and structures. In T. Mischel (Ed.), *Cognitive development and epistemology.* New York: Academic Press, 1971.

Mandler, G. *Mind and emotion.* New York: Wiley, 1975.

Mischel, T. (Ed.) *Human action: Conceptual and empirical issues.* New York: Academic Press, 1969.

Mischel, W. *Personality and assessment.* New York: Wiley, 1968.

Mischel, W. Toward a cognitive social learning reconceptualization of personality. *Psychological Review,* 1973, *80,* 252–283.

Neisser, U. *Cognitive psychology.* New York: Appleton-Century-Crofts, 1967.

Neisser, U. *Cognition and reality.* San Francisco: W. H. Freeman, 1976.

Orne, M. T. The nature of hypnosis: Artifact and essence. *Journal of Abnormal and Social Psychology,* 1959, *58,* 277–299.

Orne, M. T. On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. *American Psychologist,* 1962, *17,* 776–783.

Orne, M. T. On the simulating subject as a quasi-control group in hypnosis research: What, why, and how. In E. Fromm & R. E, Shor (Eds.), *Hypnosis: Research developments and perspectives.* Chicago: Aldine-Atherton, 1972.

Orne, M. T. The construct of hypnosis: Implications of the definition for research and practice. In W. Edmonston (Ed.), *Conceptual and investigative approaches to hypnosis and hypnotic phenomena.* New York: New York Academy of Sciences, 1977.

Ossorio, P. G. *Persons* (LRI Report No. 3). Los Angeles and Boulder: Linguistic Research Institute, 1966.

Ossorio, P. G. *Meaning and symbolism* (LRI Report No. 15). Whittier and Boulder: Linguistic Research Institute, 1978. (Originally published in 1969. Boulder: Author.)

Ossorio, P. G. Never smile at a crocodile. *Journal for the Theory of Social Behavior,* 1973, *3,* 121–140.

Ossorio, P. G. *"What actually happens"*. Columbia, S.C.: University of South Carolina Press, 1978. (Originally published in an earlier version in 1971 as LRI Report No 10a. Whittier and Boulder: Linguistic Research Institute.)

Ossorio, P. G. Outline of Descriptive Psychology for Personality Theory and Clinical Applications. In K. E. Davis (Ed.), *Advances in Descriptive Psychology* (Vol. 1). Greenwich, Conn.: JAI Press, 1981. (Originally published in 1970 as LRI Report No. 4d. Whittier and Boulder: Linguistic Research Institute.)

Piaget, J. *The origins of intelligence in children*. New York: International Universities Press, 1952.

Piaget, J. *The child's construction of reality*. London: Routledge, 1955.

Plotkin, W. Consciousness. In K. E. Davis (Ed.), *Advances in Descriptive Psychology*, (Vol. 1). Greenwich, CT: JAI Press, 1981.

Reed, G. *The psychology of anomalous experience*. Boston: Houghton Mifflin, 1974.

Rogers, C. R. Some observations on the organization of personality. *American Psychologist*, 1947, *2*, 358–368.

Sarbin, T. R. Contributions to role-taking theory: I. Hypnotic behvior. *Psychological Review*, 1950, *57*, 255–270.

Sarbin, T. R. Contextualism: A world view for modern psychology. In A Landfield (Ed.), *1976 Nebraska Symposium on Motivation*. Lincoln, NE: University of Nebraska Press, 1977.

Sarbin, T. R., & Coe, W. C. *Hypnosis: A social psychological analysis of influence communication*. New York: Holt, Rinehart, and Winston, Inc., 1972.

Sarbin, T. R., & Lim, D. T. Some evidence in support of the role-taking hypothesis in hypnosis. *International Journal of Clinical and Experimental Hypnosis*, 1963, *11*, 98–103.

Sarbin, T. R., & Mancuso, J. C. *Schizophrenia: Medical diagnosis or moral verdict?* New York: Pergamon, 1980.

Sheehan, P. W., & Perry, C. W. *Methodologies of hypnosis: A critical appraisal of contemporary paradigms of hypnosis*. Hillsdale, NJ: Laurence Erlbaum, 1976.

Shor, R. E. Hypnosis and the concept of the generalized reality-orientation, *American Journal of Psychotherapy*, 1959, *13*, 582–602.

Shor, R. E. Three dimensions of hypnotic depth. *International Journal of Clinical and Experimental Hypnosis*, 1962, *10*, 23–38.

Shor, R. E. The three-factor theory of hypnosis as applied to the book-reading fantasy and to the concept of suggestion. *International Journal of Clinical and Experimental Hypnosis*, 1970, *18*, 89–98.

Spanos, N. P. Barber's reconceptualization of hypnosis: An evaluation of criticisms. *Journal of Experimental Research in Personality*, 1970, *4*, 241–258.

Spanos, N. P. Goal-directed fantasy and the performance of hypnotic test suggestions. *Psychiatry*, 1971, *34*, 86–96.

Spanos, N. P., & Barber, T. X. Cognitive activity during "hypnotic" suggestibility: Goal-directed fantasy and the experience of nonvolition. *Journal of Pesonality*, 1972, *40*, 510–524.

Spanos, N. P., & Barber, T. X. Toward a convergence in hypnosis research. *American Psychologist*, 1974, *29*, 500–511.

Spanos, N. P., & Chaves, J. F. Hypnosis research: A methodological critique of two alternative paradigms. *American Journal of Clinical Hypnosis*, 1970, *13*, 108–127.

Strawson, P. F. *Individuals*. London: Methuen, 1959.

Sutcliffe, J. P. "Credulous" and "skeptical" views of hypnotic phenomena: Experiments in esthesia, hallucination, and delusion. *Journal of Abnormal and Social Psychology*. 1961, *62*, 189–200.

Tellegen, A. Some comments on Barber's "reconceptualization" of hypnosis. *Journal of Experimental Research in Personality*, 1970, *4*, 259–267.

Tellegen, A., & Atkinson, G. Openness to absorbing and self-altering experiences ("absorption"), a trait related to hypnotic susceptibility. *Journal of Abnormal Psychology*, 1974, *83*, 268–277.

Tulving, E., Episodic and semantic memory. In E. Tulving & W. Donaldson (Eds.), *Organization of memory*. New York: Academic Press, 1972.

Van Nuys, D. Meditation, attention, and hypnotic susceptibility: A correlational study. *International Journal of Clinical and Experimental Hypnosis*, 1973, *21*, 59–69.

Watzlawick, P., Beavin, J. H., & jackson, D. D. *Pragmatics of human communication: A study of interactional patterns, pathologies, and paradoxes*. New York: Norton, 1967.

Weitzenhoffer, A. M., & Sjoberg, B. M. Suggestibility with and without "induction of hypnosis." *Journal of Nervous and Mental Disease*, 1961, *132*, 205–220.

White, R. W. A preface to the theory of hypnotism. *Journal of Abnormal and Social Psychology*, 1941, *36*, 477–505.

Wickramasekera, I. E. On attempts to modify hypnotic susceptibility: Some psychophysiological procedures and promising directions. In W. Edmonston (Ed.), *Conceptual and investigative approaches to hypnosis and hypnotic phenomenas*. New York: New York Academy of Sciences, 1977.

Wilson, T. P. Conceptions of interaction and forms of sociological explanation. *Socioloical Review*, 1973, *35*, 697–710.

Winch, P. *The idea of a social science and its relation to philosophy*. New York: Humanities Press, 1965.

Wittgenstein, L. *Philosophical investigations*. New York: Macmillan, 1953.

Zamansky, H. S. Suggestion and countersuggestion in hypnotic behavior. *Journal of Abnormal Psychology*, 1977, *86*, 346–351.