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Research Prospectus

Many additional bodies of material could be brought forward to supplement those already considered. For example, there is a considerable amount of material on psi in classical antiquity, including two very interesting studies of ecstatic cults (Grosso, 1979, 1981) which reveal strong continuities with the anthropological material. Another large subject concerns the "traditional" theory of creativity, stemming from Plato's *Phaedrus*, which relates genius and its associated phenomena, including both ASCs and psi, to inspired possession. Murphy and White (1978) have assembled an interesting collection of anecdotes suggesting spontaneous occurrence of ASCs and psi events in contexts of extreme physical exertion and concentration reminiscent again of the anthropological settings. And so on.

Although our survey is thus very incomplete and although every subject we have covered merits far more space than is available here, the material already in hand is sufficient, we believe, to suggest the main features of an emerging pattern, a structure of relationships which, though still fragile in terms of the data presently available, lends itself to systematic further development and empirical verification. Let us now try to bring this pattern into sharper focus.

First, although the evidence is fragmentary and still "soft" at many points, there appears to be substantial reason to suspect that unusually strong manifestations of psi are systematically related to various kinds of strong ASCs. The "weak sticks make strong faggots" principle applies usefully here; despite their individual weaknesses, the bodies of data reviewed complement each other and indicate that similar accounts and types of phenomena recur

repeatedly in a wide variety of cultural and historical contexts in conjunction with a limited variety of broadly similar ASCs. Thus, for example, the literature of spirit mediumship in the West presents (on occasion) strong evidence of psi together with a fairly clear delineation of the range of altered states that are encountered, but the appearance of the gift of mediumship itself is for the most part a given, a spontaneous and unanalyzed event. The anthropological literature, by contrast, contains extremely little substantial evidence of psi, but a closely parallel delineation of favorable states together with an enormous amount of material pertinent to their deliberate production. Similarly, the various great spiritual traditions, having evolved substantially similar consciousness alteration disciplines, have also tended to produce parallel hierarchies of altered states, similar categories of psi events, and a more or less explicit sense of relationship between the two.

There is an appealing symmetry about this picture, but we hasten to acknowledge again the large role that imaginative reconstruction has so far played in producing it. Where do we go from here? Further historical inquiry into the subjects reviewed so briefly here could certainly make useful direct contributions in terms of elaboration, refinement, and even partial confirmation; but this does not seem to us the most effective way to proceed. Rather, the main contribution that such scholarship can make seems to us to lie in generating additional information pertinent to the production of the relevant altered states. This is, of course, precisely the central objective of our proposed cross-cultural survey of ASC induction techniques. For the real payoff in all of this, we suggest, will become evident to the degree that we are able to bring these states within reach of systematic investigation. The schema tentatively advanced here will be supported in the strongest possible way if we can learn to produce the relevant states in the laboratory and if these, in turn, lead to major new sources of strong psi effects.

Instrumental to improved control of ASCs would be a deeper analysis of relationships among them, their sources, properties, and physiological substrates. Clearly this is nothing less than the fundamental task of the emerging science of consciousness research. There have already been a few preliminary efforts to create "cartographies" expressing systematic relationships among various

kinds and numbers of altered states—for example, Fischer (1978), Fromm (1977), Gill and Brenman (1959), Ludwig (1966), and Sargant (1973). However, in our estimation the existing schemes can be improved upon substantially by seeing the subject in larger perspective—i.e., by taking into account more sources of data—and by avoiding restrictive and premature theoretical commitments. Although we are not yet prepared to carry through this exercise in any great detail, we can readily indicate its general form and point to some important structural features of the problem that are already visible.

In effect, we have before us a number of major and minor clusters of ASC phenomena bearing strong family resemblances to one another. The particular kinds of clusters we currently have in mind include, for example, certain syndromes such as fugue states, hysterical dissociations, battle neuroses and multiple personality; hypnotic states; dreaming, lucid dreaming, and OBEs; trance and possession trance, including spirit mediumship in both modern and premodern societies; certain drug-induced altered states; meditative states; near-death experiences (NDEs); and a variety of ecstatic and mystical states either spontaneous or deliberately cultivated. An additional sampling of minor ASC-inducing circumstances and techniques has been cataloged by Ludwig (1966). Each cluster represents a range of related phenomena, the size of the range varying from cluster to cluster. Fugues, for example, constitute a rather close-knit, small cluster, whereas "hypnotic" phenomena spread over a much wider area at least partially overlapping the normal range, and ASCs induced with major psychotropic drugs can span virtually the entire field (Grof, 1975; Pahnke and Richards, 1969).

The information presently available about these clusters varies widely in amount and pattern from case to case and consists of varying proportions of clinical observation, experimental work, physiological measurements and/or speculation, phenomenological and behavioral reports, documentation of associated unusual manifestations including in some cases ostensible or verified psi phenomena, and analysis according to one or another theoretical persuasion. Although the different clusters have typically been studied on a piecemeal basis, in relative isolation, what is particularly interesting from our present vantage point is to begin to see the

complementarities, the patterns of internal relationship that connect different clusters in different ways.

Trance mediumship, for example, clearly has much in common psychodynamically with clinical syndromes such as "hysteria" and multiple personality, although remaining distinct in that the dissociative episodes are voluntarily initiated, transient, and benign.⁵ Deep hypnosis opens out into a similar region of dissociated states replete with automatism and can readily mimic, create, or reveal clinical-type dissociation phenomena (Hilgard, 1977). Hypnotic constructs are also regularly invoked to explain the phenomena of trance and possession trance (e.g., Gill and Brenman, 1959; Mooney, 1896; Shirokogoroff, 1935) and although we agree with Bourguignon (personal communication) that at present this amounts to "explaining" one unknown in terms of another, the fundamental continuity of the two domains is clear and compelling. A dimension of increasing voluntary control seems to lead from ordinary dreams through lucid dreams to OBEs (although OBEs reached from other directions, such as near-death situations, may or may not be psychophysiological heterogeneous in their essential aspects). Out-of-body experiences also appear along a dimension of visionary trance phenomena and trance and possession trance in turn lead by degrees toward the major ecstatic states, overlapping at least partially the domain cultivated through meditative disciplines. The different meditative traditions themselves claim the ability to produce systematically, but gently, a graduated series of increasingly exalted states of consciousness leading toward the ultimate goal of ecstatic mystical union.

Clearly, enormous gaps remain in our knowledge both of the individual clusters and of the relationships among them. But one can readily imagine how, by suitably juxtaposing these complementary

⁵ There is also an interesting group of intermediate cases, the so-called "sleeping preachers." Here, as in secondary personality cases, the normal ego is involuntarily displaced, but the invading trance personality may have markedly greater capacities of various sorts, including on occasion, psi capacities. See, for example, Myers' (1903) accounts of "x+y=z" (section 934A) and Rachel Baker (section 563A) and Voipio (1951).

and evolving bodies of information, we will eventually be able to construct a more complete and coherent account of the range and relationships of available ASCs, methods for inducing and shaping them, and their associations with psi phenomena. Furthermore, we would like to record our sense that the true diversity of these ASC phenomena may actually be substantially less than appears on the surface; that is, we have the distinct impression that the great diversity of observed phenomena is generated by socially conditioned processes playing upon a relatively small number of underlying psychobiological themes. Identification of the critical dimensions of these basic themes, if they exist, could lead ultimately to an elegant conceptual and practical reorganization of the entire domain.

None of this is likely to happen overnight, of course. We can probably expect an evolutionary process in which research and theory interact on a primarily local basis and only gradually extend to a more synoptic view. The level of intensity in any area obviously depends primarily on the availability of the corresponding phenomena for study. Hypnosis and dream research are thus at present relatively active, meditation research is also well begun, and psychological and physiological research on NDEs appears to be rapidly increasing. But psychologically oriented research in several other areas is virtually nonexistent. Much of the little that does exist in some areas—for example, the psychology of trance mediumship—has already been contributed by psychical researchers. But if the central proposition of this monograph is correct, we have an important stake in practically every one of these clusters. We can and we should contribute in major ways to the further development of ASC theory and research.

From a practical point of view, the overwhelming priority is to make available for study the parapsychologically more interesting states and here the results of our inquiry definitely make for optimism. First, it is clear that the relevant states—in particular, trance, possession trance, and the major ecstatic states—are widely distributed culturally and historically, and it may therefore be speculated that they rest upon universal properties of human psychobiological organization. Additional support for this speculation can readily be marshaled. With respect to trance and possession phenomena, for

example, ASC induction rituals often take collective forms which sooner or later produce the intended effects upon a large proportion of active participants. The intrinsic power of these proceedings can readily be experienced by participants from alien cultures (Deren, 1972; Goodman, 1972), including highly unsympathetic and skeptical ones (Sargant, 1973). Even mystical states themselves may not be nearly so scarce as we customarily suppose. A recent national survey (Greeley, 1974) claims that as many as 40 percent of the population may have had, on at least one occasion, a powerful experience falling within the traditional mystical domain. Some 5 percent even describe themselves as having such experiences recurrently. The criteria used in this study for identifying experiences as "mystical" strike us as overly liberal; nonetheless, the true rate of spontaneous occurrence of mystical states could clearly be very much less than Greeley estimates and still encourage considerable optimism that the phenomena are potentially available for more systematic scientific investigation.⁶

This leads to the second major point: It is also clear that these various altered states are in considerable degree susceptible to systematic cultivation through various kinds of culturally patterned psychophysical induction procedures. Inventory and analysis of these practices should, therefore, be a top priority of ASC research. We believe that by applying judiciously selected combinations of existing practices, perhaps eventually supplemented by novel ones

⁶ Other systematic features of this material suggest important possibilities for further interpretive leverage on the psychobiology of mystical and related ASCs. For example, approximately 20 percent of those reporting mystical experiences reported also that they were "triggered" by—or supervened following—sexual orgasm. One thinks immediately of such things as the profusion of sexual imagery in the mystical literature generally, the Indo-Tibetan Tantric traditions and the sexual overtones that often permeate mediumistic performances or even the deliberate psi performances of individuals such as Girard, Sylvio and Rudi Schneider. Sargant (1973, ch. 7) specifically attempts to link the physiology of orgasm with cross-cultural material on possession trance. A good deal of information has by now been accumulated about the psychobiology of sexual experience (Davidson, 1980) and this may provide useful clues to psychophysiological events associated with the deeper ecstatic states as well.

of our own invention, we can reasonably expect to be able sooner or later to bring the corresponding states within reach of controlled and systematic investigation of their properties, including their hypothesized relationships with psi capacities.

This is clearly a long-term project, but meanwhile there are many related things we can do. A number of specific suggestions have already been made although we have tended to emphasize the psychophysiological interests that are central to our own laboratory. Readers with other orientations will no doubt see many additional possibilities for research. Here we want rather to emphasize a more general matter of research strategy: We believe it should prove productive to intensify psi research with selected subjects, where the initial selection is now not direct, i.e., in terms of tested capacity to generate psi effects, but indirect, i.e., in terms of capacity to enter ASCs of the sorts emphasized here. Particularly promising groups would certainly include exceptional hypnotic subjects, mediums, and advanced practitioners of various meditation techniques. The essence of the selection strategy is to find and work intensively with people who can really move out of the "normal" range of consciousness.

A number of critical methodological caveats must be inserted here, however. It would be naive to suppose that simply by bringing ASCs into the laboratory we will automatically produce uninterrupted fountains of powerful psi effects. Certainly, we already know that ASCs are neither necessary nor sufficient for production of psi. There are many mediums, but few Homes, Pipers, Leonards, and Garretts; many "somnambules," but few Didiers and Leonies; and so on. The relation between ASCs and psi is apparently not one of simple mechanical cause and effect. Once an ASC is available, there may be a considerable amount of secondary learning and exploration to do before its potentials can be effectively utilized. This implies a style of experimentation that stresses intensive work with selected individuals, rather than the research-factory mode that modern behavioral research has tended to cherish.

Secondly, we again emphasize the importance of adapting our psi tasks and experimental procedures to the nature of the particular individuals and ASCs involved. The mechanical administration of forced-choice tests to psychedelic subjects is an example not to be

repeated. An excellent review of methodological considerations in experimentation with psychotropic substances, which applies for the most part with equal force to any other procedure involving induction and exploration of ACSs, is provided by Tart (1977).

Third, finding out how to turn on an ASC and use it as an effective vehicle for psi performance, while certainly a great step forward, would only be a beginning. We would then have to go on to try to understand why the ASC works. Is it just the shift in state that matters; associated factors such as conflict reduction, changed attitudes or expectancies; or something intrinsic to the ASC itself?

Finally, some readers may have wondered why we should advocate investing substantial amounts of effort in learning how to induce ASCs if we can count on being able at least occasionally to find persons who have somehow already learned to enter them. First, we cannot in fact count on finding such persons. Furthermore, those we do find may arrive equipped with a variety of other characteristics that reduce the prospects for their effective participation in research. Capacity to produce our own ASC sources—hopefully including at least some of the researchers themselves—would simply represent a much higher level of scientific understanding and control and could be our ultimate answer to the problem of replication in psi research.

To conclude, we have strongly recommended increased investment by psi researchers in systematic studies of altered states of consciousness and particularly in studies that lead in the direction of their controlled production and exploration under laboratory conditions. Historically minded readers will surely have noted many parallels here from the earliest days of psychical research. F. W. H. Myers (1903), in particular, keenly appreciated the importance of studying all the varied manifestations of ASC phenomena not only in their uniqueness but, more importantly, in their sequential and logical relationships to one another.

We are not simply turning back the clock, however. Myers and his colleagues were ahead of their time in crucial respects and their early efforts were unfortunately soon pushed aside by the nascent radical behaviorism that occupied center stage following the death of William James. But the climate has now drastically changed. Virtually the entire apparatus of research methodology as we know

it today is a creation only a few decades old. Many of the problems of experimental design and statistical evaluation of evidence that the early workers struggled with unsuccessfully can be routinely handled today. Moreover, we have become more sophisticated in the subtleties of research involving human beings and have developed a variety of devices for verifying introspective reports and inferring the nature of covert processes. In recent years, these behavioral techniques have been further reinforced by the advance of psychophysiological methods which permit more or less direct observation of subtle events taking place in the interior of the organism. All of these forces acting in concert have now compelled a relaxation of the extreme behaviorist strictures against introspection. Long-forbidden topics related to human consciousness, its vicissitudes, structure, and contents, are surging once again toward the center of the research effort, but supported now at a higher level by a great mass of hard-won technical and substantive results.

This is emphatically not another passing fad. It is the inevitable return of psychology to its most central problems. We have a role to play in this evolving drama, quite possibly a crucial role if we play effectively. In so doing, we will not only advance our interests as psi researchers, but also hasten the emergence of an enlarged psychological science and assure our place within it.

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