

Arch.gen.Psychiat. 25, 481-489 (1971).

LSD 2233

The human organism has two basic modes of function: (1) the receptive mode oriented toward the intake of the environment, and (2) the action mode oriented toward manipulation of the environment. Both physiological and psychological dimensions are integrated in these modes. By utilizing this model we can understand a number of puzzling phenomena in the fields of attention, mystical perception, hallucinogenic drugs, and psychosis. Although states of consciousness associated with the receptive mode are often pejoratively labeled as "regressive" or "unreal," there is evidence for considering such modes of consciousness to be mature organismic options appropriate to particular dimensions of reality.

WHEN WE consider the psychological and physiological variations that occur from day to day and from minute to minute as we work, eat, play, or respond to emergencies or drugs, or to radical shifts in our environment or goals, we are presented with a confusing mass of observations that are difficult to organize. Changes occur in body boundaries, in muscle tension, in sensory vividness, in electroencephalograms, in imagery, in logic, and in self-awareness. Some of these changes are slight, others can be extreme. Discussions of states of consciousness usually do not integrate these many physiological and psychological variables and, in addition, it is usually assumed that unusual states of consciousness are pathological or unreal. This paper will present a model in which psychological and

physiological variations are viewed as manifestations of two basic organismic states or modes that are coordinated to a particular function. The model will be used to clarify phenomena in the fields of attention, mystical perception, hallucinogenic drugs, and psychosis.

Action Mode and Receptive Mode

Let us begin by considering the human being to be an organization of components having biological and psychological dimensions. These components are coordinated in two primary modes of organization: an "action" mode and a "receptive" mode.

The action mode is a state organized to manipulate the environment. The striate muscle system and the sympathetic nervous system are the dominant physiological agencies. The EEG shows beta waves and baseline muscle tension is increased. The principal psychological manifestations of this state are focal attention, object-based logic, heightened boundary perception, and the dominance of formal characteristics over the sensory; shapes and meanings have a preference over colors and textures. The action mode is a state of striving, oriented toward achieving personal goals that range from nutrition to defense to obtaining social rewards, plus a variety of symbolic and sensual pleasures, as well as the avoidance of a comparable variety of pain.

The attributes of the action mode develop as the human organism interacts with its environment. For example, very early in life focusing attention is associated not only with the use of the intrinsic muscles of the eyes, but also becomes associated with muscle movements of the neck, head, and body, whereby visual interest is directed toward objects. Likewise, thinking develops in conjunction with the perception and manipulation of objects and, be-

cause of this, object-oriented thought becomes intimately associated with the striate muscle effort of voluntary activity, particularly eye muscle activity.¹ Specific qualities of perception, such as sharp boundaries, become key features of the mode because sharp boundaries are important for the perception and manipulation of objects and for acquiring knowledge of the mechanical properties of objects. Sharp perceptual boundaries are matched by sharp conceptual boundaries, for success in acting on the world requires a clear sense of self-object difference. Thus, a variety of physiological and psychological processes develop together to form an organismic mode, a multidimensional unity adapted to the requirements of manipulating the environment.

In contrast, the receptive mode is a state organized around intake of the environment rather than manipulation. The sensory-perceptual system is the dominant agency rather than the muscle system, and parasympathetic functions tend to be most prominent. The EEG tends toward alpha waves and baseline muscle tension is decreased. Other attributes of the receptive mode are diffuse attending, paralogical thought processes, decreased boundary perception, and the dominance of the sensory over the formal. The receptive mode is aimed at maximizing the intake of the environment and this mode would appear to originate and function maximally in the infant state. The receptive mode is gradually dominated, if not submerged, however, by the progressive development of striving activity and the action mode.

In the course of development the action mode has priority to insure biological survival. The receptive mode develops also—but it occurs as an interlude between increasingly longer periods of action mode functioning. This developmental preference for the action

Accepted for publication Feb 22, 1971.

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An earlier version of this paper was read before the Conference on Voluntary Control of Internal States, Council Grove, Kan, April 16, 1970.

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mode has led us to regard the action mode as the proper one for adult life, while we have tended to think of the more unusual receptive states as pathological or "regressive."

Within each mode the attributes or components are interrelated to form a system, so that a shift in any one component can affect any of the others. For example, a decrease in muscle tension can decrease anxiety because of a shift in mode. Depending on the relative strength of competing motives and functional orientation, a change in one component of a mode may or may not bring about a noticeable shift to the other mode and with that shift a change in other components. The components are not independent of each other or caused by each other (eg, lowering muscle tension lowers anxiety; muscle tension, therefore, equals anxiety), but are related through the pattern or mode of organization in which they participate. If the balance of motivational force is very strong in favor of a particular mode that mode will be quite resistant to change, even if a component is changed.

A very commonplace instance can be given of these two different modes in daily experience. Try thinking about a problem while lying flat on your back and then contrast that with thinking about the same problem while sitting upright. You will notice that maintaining a directed, logical stream of thought is much easier in the upright position. This can be understood as a function of two different organismic states, initiated by postural changes, but not determined by postural changes alone. It is possible to think logically while supine but it is more difficult. Our action mode activities develop in conjunction with an upright posture while receptivity originated in the reclining, infant state.

Language, it should be noted, is the very essence of the action mode; through it we discriminate, analyze, and divide up the world into pieces or objects which can

then be grasped (psychologically and biologically) and acted upon. The richness of our vocabulary reflects the extent to which we apply the action mode to a particular sector of our environment. For example, the average person has only one word for snow, the skier has several, and the Eskimo many. It is not just a matter of how much we detect differences between varieties of snow or any other dimension. Consider the experience of "love." Here again, the average person has only one word for love, yet he has probably experienced a variety of love states. We have not developed words for these states because love is experienced in the receptive mode; indeed, it requires the receptive mode for its occurrence. Color *experience* (rather than color as a sign) requires the receptive mode; colors have only a few names compared to the vast variety of hues to which we are sensitive. In the case of the artist, however, who *works with, manipulates, and makes* color objects, the case is different. An artist's vocabulary is much expanded. The Whorfian hypothesis, that we are unable to think outside of our language structures, has relevance only for the action mode. We manipulate our environment through language-directed strategies.

To illustrate the modes more concretely, consider a cab driver in heavy traffic, struggling to get a passenger to the airport in time. He is in the action mode, contending maximally with his environment, trying to direct and control what happens, and focusing intensely on a goal located in future time. His conscious experience features sharp boundary perception, high field articulation, and verbal, logical thought patterns. His EEG is desynchronized and his baseline muscle tension is high. At the opposite pole is the monk in meditation who is in a receptive mode with a corresponding state of consciousness that may feature merging of the self with the environment or an ineffable (nonverbal) perception of unity, or both. Muscle relaxation,

cortical synchrony, and sensory dominance are principal features of his state. The monk endeavors to adopt an attitude of selflessness and abandonment of personal striving. To this end, he gives up personal choice and material gain. Language and thinking are given low priority and a vow of silence may be taken.

These two modes are not to be equated with activity and passivity. The functional orientation that determines the mode has to do with the *goal* of the organism's activity: whether or not the environment is to be acted upon, or whether stimuli or nutriment are to be taken in. "Letting it" is an activity, but a different activity than "making it." Likewise, it is not the presence or absence of physical activity per se that is the mode determinant. In the pure state of the receptive mode the organism does seem helpless to act on the environment, as in states of ecstasy or drug intoxication. In most receptive mode conditions, however, an active relationship with the environment takes place, as in the case of the monk working in the garden or lovers in sexual intercourse. Characteristically, the relationship to the environment in the receptive mode is what Buber describes as the "I-Thou," in contrast to the "I-It" of the action mode.² For example, the monk at work in the garden could have two quite different *experiences* depending on which mode is dominant. Likewise, the lovers may be "screwing" rather than "making love." In most cases, we are talking about a modal balance or mixture, whose characteristics depend on the extent of dominance of a particular mode. The enlightened monk, working in the garden, operates in the action mode only to the extent needed to conduct his work activity, and the receptive mode can thereby still play a prominent role in his conscious experience.

Just as the action mode and the receptive mode are not the equivalents of activity and passivity, they are also not to be equated

with the secondary and primary process of psychoanalytic theory. There is some similarity between aspects of the receptive mode and the cognitive style associated with the primary process. The bimodal model, however, addresses itself to a functional orientation—that of taking in versus acting on the environment. The receptive mode is not a “regressive” ignoring of the world or a retreat from it—although it can be employed for that purpose—but is a different strategy for engaging the world, in pursuit of a different goal.

The choice of mode is determined by the motives of the individual organism. Motivations exist, however, at different levels and with different time scales. It is hard to say much about the specific hierarchy of motives that affect the choice of mode. It is my impression, however, that the baseline of mode choice is set by the general orientation of the individual's culture. In Western civilization, that orientation is toward the individual's exerting direct, voluntary control over all phases of his life. This orientation of control is enhanced by the ideal of the self-made man and by the pursuit of material and social goals—all of which call for manipulation of the environment and of the self. The action mode dominates our consciousness. Men, however, have been concerned for many years with ways to shift to what I have described as the receptive mode. Later on I will discuss an example of a system that was developed to make the receptive mode the dominant orientation.

Although this bimodal analysis of organismic states at first may seem to be quite arbitrary and make little theoretical difference, I will now show how this model is very useful in clarifying a number of problems that otherwise would remain obscure.

Poetzel Effect.—Poetzel observed a difference in what happens to stimuli that are perceived in the periphery of awareness as compared to those in the center.³ A stimulus that is incidental, on the margin of

the field of awareness, is “processed” differently than stimuli in the center. In the former case, dream processes dominate, in the latter case, rational logic holds sway. This phenomenon can be understood in terms of the two organizational modes. Stimuli at the center of awareness are subject to the organizational mode associated with object manipulation—the action mode. In terms of thought processes, this means object-based logical thought. Stimuli in the periphery are processed according to the more indirect, sensually oriented, intake goal of the receptive mode. This mode of thought uses paralogical strategies.

Silverman's Chronicity Study.—Silverman and his colleagues have described changes in the cognitive style of schizophrenic patients as their stay in the hospital increases.^{4,5} They report that with confinement of three years or more the attentional style of schizophrenic patients changes toward diminished field articulation and diminished scanning. Similar results were found in prison inmates.⁶ These findings are not easy to explain on the basis of chemical deficits or “deterioration.” The mode model does, however, suggest a way of understanding the shift. Diminished field articulation means that an object is less sharply differentiated from its surroundings, and diminished scanning means that fewer objects in the visual field have awareness centered on them. On the other hand, where field articulation is sharp and scanning is wide, the subject is in the best position to encounter and manipulate, to actively engage the object environment. This active striving style, however, is specifically defeated by the hospital environment if the patient must stay in it over several years. Such long-term frustration of active striving would be expected to result in diminished striving and a shift to the receptive mode.

Gaffron Phenomenon.—Gaffron has described different modalities of conscious experience according to where on the object attention is focused.⁷ For example, if visual awareness is centered on the near

side of an object, (“grasping”) the object is perceived “exteriorly” and the dominant qualities of the experience are form, surface, distance, and separateness from the observer. Awareness centered on the far side of an object (“mere looking”) features “propereceptive” qualities of volume, weight, and “interior” feelings of tension and inner movement. The object seems to intrude or extend into the boundaries of the self. The reader can observe this for himself if he stops for a moment and looks at a nearby object in these two ways.

It is most instructive to observe this shift of mode in situations such as eating a pear. In reaching for the pear, the focus is on the near side, in preparation for grasping it. As the pear is brought to the mouth, the focus shifts to the far side and beyond. In the act of eating, the pear is inside the zone of focus and, literally, being incorporated into the organism. The grasping of the pear is associated with the action mode and the intake of the pear with the receptive. The accompanying visual shifts are integral parts of the change in mode so that a shift of visual activity is accompanied by a shift in other components of the mode involved, for example, muscle relaxation and parasympathetic stimulation. The developmental coordination of the visual focus and body activity persist even though the objects involved may not be ones that can be eaten.

Neurotic Styles.—Shapiro has presented evidence that the characteristic way an individual attends to stimuli, his attentive style, has important effects on his conscious experience.⁸ Shapiro distinguishes between two main groups—sharply focused attention (obsessive-compulsive and paranoid styles) and diffuseness of attention with absence of sharp focus (hysterical styles). His conclusions are as follows: “the most conspicuous characteristic of the obsessive-compulsive's attention is its intense, sharp focus. These people are not vague in their attention, they concentrate and par-

ticularly do they concentrate on detail . . . (they) seem unable to allow their attention simply to wander or passively permit it to be captured. Thus, they rarely seem to get hunches, they are rarely struck or surprised by anything." The consequence of such a pervasive style of attention is that "he will often miss those aspects of a situation that give it its flavor or its impact; thus, these people often seem quite insensitive to the 'tone' of social situations." "Certain kinds of subjective experiences, affect experiences, particularly require, by their nature, an abandonment or at least a relaxation of the attitude of deliberateness and where such relaxation is impossible, as in the obsessive-compulsive style, those areas of psychological life tend to shrink."

Shapiro's conclusions support the concept of different organizational modes. In the case of the obsessive-compulsive, his thought and style is focused on object manipulation, an activity at which he is usually quite successful. Hunches or moments of inspiration that come about involuntarily in creative states or moments of mystical revelation are, however, quite absent from the experience of persons rigidly committed to the object-manipulative mode of cognition and perception. Likewise, rich affective experience is not found with that mode because "abandonment" and "relaxation of the attitude of deliberateness" is not compatible with the action mode. In the diffuse, hysterical style, however, we see the counterpart to the receptive-sensory mode. Here, sensory details, inspiration, and affect dominate the experience.

Body Boundaries, Muscle Relaxation, and Perception.—Reports of subjects undergoing autogenic training, a European treatment technique of self-suggested relaxation, and reports of subjects undergoing relaxation training by means of feedback devices, indicate the frequent occurrence of body boundary changes correlated with deep levels of muscle relaxation^{9,10} (and J. Stoyva and

Budzynski, personal communication). Similar phenomena are noted under conditions of sensory isolation and in the induction phase of hypnosis. These correlations become understandable when we identify fluid boundaries and muscle relaxation as components of the receptive mode, components that tend to vary as a group when a shift in mode takes place. The conditions of autogenic training, sensory isolation, and hypnosis all predispose to a taking in of the environment rather than an orientation towards acting on the environment. Although the direct influence on muscle tension or sensory input is important, the shift in mode may be due as much to the accompanying shift in the orientation of the subject.

This line of reasoning also suggests an explanation for instances of reduction of anxiety as a consequence of muscle relaxation. Insofar as anxiety is an affect linked to future action (eg, "If I perform this destructive or forbidden act, I will be destroyed"), the shift to the receptive mode could be expected to decrease anxiety because the state of receptivity is not organized around action to be directed at the environment. In the time dimension, the action mode is the Future and the receptive mode is the Now.

Experimental Studies of Meditation.—For many centuries contemplative meditation has been prescribed as a technique for bringing about an altered perception of the world and of the self. This different mode of perception is characterized by a sense of unity of the person with his environment. In some cases, heightened sensory vividness is part of the description as well as timelessness, exultation, strong affect, and a sense that the horizon of awareness has been greatly expanded. In an attempt to study the possible connection between contemplative meditation and mystical experiences, I instructed a group of normal subjects in a basic procedure adapted from the Yoga of Pantanjali^{11,12}:

The purpose of the sessions is to learn about concentration. Your aim is

to concentrate on the blue vase. By concentration I do not mean analyzing the different parts of the vase, or thinking a series of thoughts about the vase, or associating ideas to the vase; but rather, trying to see the vase as it exists in itself, without any connections to other things. Exclude all other thoughts or feelings or sounds or body sensations. Do not let them distract you, but keep them out so that you can concentrate all your attention, all your awareness on the vase itself. Let the perception of the vase fill your entire mind.

Each subject performed this exercise for one-half hour at a time, for 40 or more sessions spread over several months. The subjects' perceptions of the vase changed in the following directions: (1) an increase in the vividness and richness of the vase percept (for example, they described it as "luminous," "more vivid"); (2) the vase seemed to acquire a kind of life of its own, to be animated; (3) there was a decrease in the sense of being separate from the vase, occurring in those subjects who continued longest in the experiment (eg, "I really began to feel, you know, almost as though the blue and I were perhaps merging or that the vase and I were. It was as though everything were sort of merging"); and (4) a fusing and alteration of normal perceptual modes (eg, "when the vase changes shape, I feel this in my body," "I began to feel this light going back and forth").

As I have discussed in an earlier paper, these data are not easily explained by the usual concepts of suggestion, projection, autohypnosis, or sensory isolation.¹¹ I interpreted these changes as being a "deautomatization," an undoing of the usual ways of perceiving and thinking due to the special way that attention was being used. The meditation exercise could be seen as withdrawing attention from thinking and reinvesting it in percepts—a reverse of the normal learning sequence. However, the concept of modes serving a particular function clarifies the phenomenon even further. It was required that the subjects adopt a particu-

lar *attitude*, that of a passive abandonment. This attitude represented an important shift for the subject away from the action mode and towards the receptive mode. Instead of grasping, manipulating, or analyzing the object in front of him, he was oriented to a different function. Instead of isolating and manipulating the object, he becomes one with it or takes it into his own space. Then sensuous attributes of the object, which are ordinarily of little importance, became enhanced and tend to dominate.

It is of interest that after the experiments subjects tended to report that they had learned something important in that experience but could not specify what it was. "I've experienced . . . new experiences, and I have no vehicle to communicate them to you. I expect that this is probably the way a baby feels when he is full of something to say about an experience or an awareness and he has not learned to use the words yet." The experience was ineffable in the sense of not being suited for verbal communication, not fitting the customary categories of language of the action mode.

Physiological studies of Yogis, Zen masters, and students of transcendental meditation indicate that proficiency in meditation is characterized by a predominance of alpha waves plus such changes as a lowered respiratory rate.¹³⁻¹⁵ Beginning students, intermediate students, and masters could be separated on the basis of their EEG during the meditation state—the further advanced the student, the greater the dominance of alpha waves. These data can be understood if we regard meditation training as developing the receptive mode.

Zen Consciousness.—Zen Buddhism aims at changing the experience of a person to that particular view of himself and the world which is called "enlightenment." If one looks closely at the psychosocial system of a Zen monastery, it becomes clear that different aspects of that system

are coordinated towards changing the individual's usual orientation of striving for personal goals. The monastery aims at producing a state of acceptance and "nondiscrimination." The principal means by which this is accomplished are meditation, communal living, and an ascetic way of life.

The highest form of Zen meditation is *shikan-taza* or "just sitting." At first it is hard to grasp the literalness of the instruction to "just sit." But it means exactly what it says. A person meditating is "not supposed to do" anything except to *be* sitting. He is not to strive for enlightenment because if he is truly "just sitting," he is enlightened. That state of beingness is enlightenment itself. During meditation, thinking and fantasy are treated as intruders or distracting influences, to be patient with until they go away. Pain from the crosslegged sitting posture is regarded as part of the sitting and not to be avoided or categorized or even fought. "Be the pain" might be the instruction given to a student. The "being" that is referred to is essentially a sensory-perceptive experience. The teaching is aimed specifically at doing away with categorizing and classifying, an activity that is felt to intervene between the subject and his experience.

In meditation, the sense of time can change to what might be called timelessness. Again, the urgency to accomplish things is undermined by this timeless orientation. Furthermore, during meditation the subject may experience a sense of total satisfaction with his moment-to-moment experience so that the need to strive for a distant satisfaction is diminished once again.

The sessions of sitting meditation take place three or more times daily within the setting of a communal society. No one accrues profits in that society. There are some status rewards but these tend to be minimized. The students share in whatever work needs to be done, share the same daily routine, the same daily food, and the

same discipline. Every activity is represented as being equally important as any other. Thus, washing dishes is held to be as "good" as an activity as walking in the woods. Once again, such an attitude and structure militates against an orientation towards the future, because the future contains nothing intrinsically more satisfying than what is contained in the present.

I stress the matter of the shift in functional orientation because the concept of an organizational mode is based on the idea that psychological and biological activities are integrated in the service of the total organism and the functional attitude of that organism is the crucial determinant of which mode is adopted. To take another example, the wish for perpetual survival is perhaps the most powerful desire motivating the ordinary person's life. It is very interesting to see how this problem is handled in the Zen system. To begin with, the idea of being dead versus being alive is labeled a fallacious concept based on dualism. The Buddhist cosmology of constant change, of a basic Nothing that takes an endless variety of forms, says that the student is part of a process that does not end but simply changes or flows. Most important of all, the student is taught that his notion of a soul, of an enduring self, is erroneous. Indeed, the concept of a self is held to be the cause of all suffering. During meditation the student may have the concrete experience that his sense of separateness is arbitrary and an illusion.

The principal purpose or goal held out for the students as legitimate and worthwhile is that of the Buddhist vow "to save all sentient beings" from the suffering of delusion. It should be noticed that this is a selfless goal. The student will not be rewarded by having a special place in heaven if he accomplishes this, but rather that purpose is the purpose of the universe of which he is a part. Such an ethic of action directed toward

the good of others (the basic ethic of almost all religions) provides a dimension for participation in the world in an active and energetic way but one that attempts to minimize the mode of consciousness associated with striving for one's own personal goals.

The asceticism of the Zen community is not that of the anchorite who despises sensual pleasure as an enemy, but an asceticism that forms a backdrop against which the student can see clearly the role that his desires play in his suffering. In this connection it should be noted that a contemporary Zen master described renunciation as, "We do not give them up, but accept that they go away."¹⁶ This open-handed approach to life means that any sensual pleasure that comes along is to be enjoyed for its own sake, but there is to be no attempt to hang on, to grasp, to strive for, to reach for. If we look at the goals around which we organize many of our activities, we see that they are often oriented towards prolonging or bringing back a particular pleasure that we have had, often at the detriment of the pleasure available at the moment. This lesson of non-grasping is brought home to the student over and over again in the different situations that arise at the monastery.

Thus, the emphasis on experiencing, or enduring, and on being—rather than on avoiding pain or seeking pleasure—provides the groundwork for a mode of consciousness that Zen texts describe as nondualistic, timeless, and non-verbal. It is part of the mode of organismic being that I have categorized as the receptive mode.

Mystical Psychosis.—One of the puzzling phenomena of psychosis is that of the mystical state preceding or marking the onset of many cases of acute schizophrenia. As Bowers and Freedman have described,¹⁷ the specific configurations of these states vary from case to case but they share basic features: marked heightening of sense perception; a feeling of communion with people, the

world, God; intense affective response; and blurring of perceptual and conceptual boundaries. First-person accounts of this type of psychotic experience are strikingly similar to reports of sensate mystical experience and suggest a similar process. In terms of the bimodal model, the experience is one of a sudden, sharp, and extreme shift to the receptive mode: decreased self-object differentiation, heightened sensory intake, and nonverbal, nonlogical thought process.

Both mystical and psychotic states appear to have arisen out of a situation in which the individual has struggled with a desperate problem, has come to a complete impasse, and given up hope, abandoned the struggle in despair.¹⁸ For the mystic, what emerges from the "cloud of unknowing" or the "dark night of the soul" is an ecstatic union with God or Reality. For the psychotic person, the world rushes in but does not become integrated in the harmony of *mystico unio* or *satori*. Instead, he creates a delusion to achieve a partial ordering and control.

As I have discussed earlier, mystical practice can be viewed as a cultivation of the receptive mode by means of a particular functional orientation and control of thought and environment. No such training program precedes the many examples of mystical psychotic episodes cited above. How are we to understand them then? Maternal deprivation in the case of children and loss or rejection by a loved person in the case of adults are frequently reported as precursors or precipitants of psychosis.¹⁹ In my own experience and in that of others, therapeutic investigation reveals intense hatred and destructive fantasies directed towards the loved person but not acknowledged by the patient. The emergence into consciousness of the anger directed towards the appropriate person is usually accompanied by a dramatic improvement in the patient's condition and marks the demise of the psychotic defense. This suggests the possibility that the psychotic alteration in consciousness

is a defensive shift to a mode that will preclude destructive action on the other person. If someone is ecstatic, Christlike, overcome with the significance of a thousand details, buffeted by alternate winds of fear, exultation, grief, and rapture, he is in a state that maximizes what comes in and minimizes the possibility of aggressive action on someone else. Not incidentally, maximum sensory intake can be viewed as dealing with the painful emptiness following deprivation of love.

Although such a person may pass to a phase of tightly ordered paranoid delusion in which he can be dangerous, in the mystical, flooded stage he is helpless, like an infant. The shift to the mystical state is a functional shift on the part of an organism desperately concerned over final loss of nutriment. The control gates are thrown down and the world floods in through the senses and through the inner stores of affect and memory. The action mode is abandoned. When the person begins to drown in the overload, he asserts control in a delusional compromise that to some extent restores order and effectiveness while providing a substitute object.

The mystics' success in achieving a harmonious integration of self and world may be explained by a consideration of the many factors that differentiate the life and practice of the mystic from that of the psychotic. But the similarity of the initial experience that occurs when striving towards the world is abandoned suggests a similar basic organismic shift—the giving up of the action mode in favor of the receptive. In the case of acute mystical psychosis, a crucial rejection or life impasse triggers a collapse of the action mode and a sudden rush of receptive mode cognition and perception ensues for which the person is unprepared and unsupported. Delusional reordering then takes place to solve the affective impasse.

Lysergic Acid Diethylamide (LSD).—Accounts of LSD experi-

ences reveal a cluster of characteristics identifying it with the receptive mode: a marked decrease in self-object distinction; a loss of control over attention; the dominance of paralogical thought forms; intense affect and vivid sensory experience; decreased field articulation and increased parasympathetic stimulation; plus a reification of thought and feeling with a corresponding decrease in "reality testing."

As in the case of meditation, I hypothesized that the general effects of LSD and related drugs were those of "deautomatization," an undoing of the automatic psychological structures that organize, limit, select, and interpret perceptual stimuli.²⁰ In considering the problem of explaining the perceptual and cognitive phenomena of mystic experience as a regression, I stated, "One might call the direction regressive in a developmental sense, but the actual experience is probably not within the psychological scope of any child. It is a de-automatization occurring in an adult mind, and the experience gains its richness from adult memories and functions now subject to a different mode of consciousness." That mode of consciousness I would now designate as the receptive mode and consider it to be a mature cognitive and perceptual state, one that is not ordinarily dominant, but is an option that has developed in richness and subtlety in parallel with the development of the action mode that is our customary state of consciousness. Reports of the LSD experience show the complex possibilities of thought and perception that can occur in the receptive mode.^{21,22}

It is noteworthy that one of the effects of widespread use of LSD and other psychedelics has been to stimulate a revival of interest in Eastern religions. This orientation towards Eastern mysticism can be understood if Yoga and Zen are viewed as developments of the receptive mode: a perception and cognition that features the blurring of boundaries; the merging of

self and environment, coupled with affective and sensory richness and marked by a detachment from the object-oriented goals of the action mode.

Physiological Dimensions in Psychosis and LSD.—The physiological data pertaining to meditating Yogis and Zen monks are clear and support the mode hypothesis. In the case of acute and chronic schizophrenia, however, the data are ambiguous or contradictory. Chronic schizophrenic patients tend to have EEGs suggesting cortical activation and high anxiety levels.²³⁻²⁵ A study of hospitalized schizophrenic patients undergoing acute decompensation shows an increase and wide variability of muscle tension, rather than the decreased muscle tension predicted on the basis of the receptive mode model.²⁶ On the other hand, Salamon and Post,²⁷ using a special method of measuring alpha waves, found increased alpha-wave production in schizophrenic patients as compared to controls. Studies of autonomic function are likewise variable and unclear. Issues of diagnosis, chronicity, and drug effects undoubtedly confound the data. In the case of LSD states, there is not much data to work with, but the clinical variability of the states and the frequent occurrence of anxiety suggest a situation similar to the psychoses. Although a more detailed and systematic physiological investigation needs to be done to solve this problem, in these instances we are probably dealing with an unintegrated mixture of modes. One way of understanding this is to consider the fact that, in the case of schizophrenia, the shift to the receptive mode may arouse great anxiety and a compensatory attempt to control the receptive mode experience, an attempt that is an action mode response. That such a response creates a problem is suggested by the lore of LSD users whose standard advice for those about to take LSD is not to fight the experience, but to "go with it," to "float downstream," and abandon oneself to

what feels like "ego death." It is said that if one can do this, chances are good that the experience will be beatific. On the other hand, if the subject attempts to control or fight the experience, a "bad trip" is the likely result. Giving oneself up to an unusual experience, abandoning oneself to "ego death," is precisely what Yogis and Zen monks are trained to do, but what schizophrenic persons find most difficult. Perhaps this difference underlies the different physiological portraits accompanying these different situations.

Implications

Control of Psychological and Physiological Dimensions.—The concept that dimensions of a state of consciousness are components of organismic modes suggests the possibility of indirect control over specific aspects of each mode. For example, it becomes reasonable to affect the sharpness of perceptual boundaries by increasing muscle tension or to decrease anxiety by lowering it. Similarly, by restricting analytic thinking and attending to a sensory mode, alterations in muscle tension, EEG, and galvanic skin response can be obtained. By delineating other dimensions of the modes we may be able to widen our repertoire of techniques for change along a variety of organismic dimensions.

Strategic Options.—The receptive mode seems to be one in which certain *activities* are facilitated. The examples below are assumed to involve instances of the receptive mode by virtue of their emphasis on relinquishing conscious striving and intellectual control:

Subjects who learn to control functions of the autonomic nervous system, such as alpha-wave production or finger temperature, learn that they must let it happen rather than make it happen. In the case of temperature control, Green et al²⁸ have termed this activity "passive volition."

Accounts of the process of creative synthesis show several distinct stages: first a stage of directed in-

tellectual attack on the problem leading to a feeling of impasse, then the stage of "giving up," in which the person stops struggling with the problem and turns his attention to other things. During this unfocused rest period the solution to the problem manifests itself as an "Aha!" or "Eureka!" experience—the answer is suddenly there of itself. The final stage sees a return of directed intellectual activity as the "answer" is worked over to assess its validity or fit with the object world. In terms of the mode model, the first stage is one in which the action mode is used, followed by the receptive mode in which the creative leap is made, followed by a return to the action mode to integrate the discovery with the object world.

It may be that paranormal phenomena require the development of the receptive mode. Such a possibility fits well with assertions of classical Yogic literature and with contemporary dream research.²⁹

A prosaic example of the need to switch to the receptive mode to achieve a particular aim is the attempt to recover a forgotten name. Typically, the person struggles with it and then gives up, saying, "It will come to me in a minute"—and it does. What could not be gained by a direct effort was accomplished by relinquishing effort and becoming relatively receptive.

In ordinary life circumstances, the receptive mode probably plays its most important role in sexual intercourse. Erikson describes the psychological importance of the healthy sexual act as "... a supreme experience of the mutual regulation of two beings (that) in some way breaks the point off the hostilities and potential rages caused by the oppositeness of male and female, of fact and fancy, of love and hate. Satisfactory sex relations thus make sex less obsessive, overcompensation less necessary, sadistic controls superfluous."³⁰ Psychotherapeutic investigation shows that an individual's capacity for such a satisfying sexual experience is in proportion to his or her capacity to relinquish control, to

allow the other person to "enter in," to adopt what I have termed the receptive mode orientation. It is of interest to this discussion that sexual climax in persons with such a capacity is associated not only with intensely heightened sensation and diffuse attention, but with a decrease in self-other boundaries that in some cases results in experiences properly classified as mystical.³¹ An inability to shift to the receptive mode, however, results in a serious impairment of the sexual act. Sensation, release, and feelings of closeness become attenuated or absent.

Knowledge.—Although this discussion of modes began with a simple dichotomy of action—namely, manipulating the environment versus taking it in—the study of mystical consciousness suggests that the receptive mode may provide a way of "knowing" certain aspects of reality not accessible to the action mode. The "knowing" that takes place is usually a nonverbal experience, although it may later be translated into words in order to be shared with others. Thus, what is taken in is not only those aspects of the environment with which we are familiar but other aspects as well.

Contemporary psychological models, such as primary process theory, view the object world as the standard by which to judge the realism of perception and cognition. The receptive mode and other modes yet to be discerned or utilized can, however, be conceptualized as modes by which the organism addresses itself to reality dimensions other than those of the object world associated with the action mode and logical thinking. The "thinking" of the receptive mode may be organized in terms of a *different* logic in pursuit of aims located along different dimensions of reality than those to which we ordinarily address ourselves.

It may be felt that to talk of other dimensions of reality is to indulge in romantic thinking, but however it may be judged the idea of other dimensions is not illogical. Considerations of developmental psychology provide the basis for the

possibility that the organism has exercised a considerable selection over what features of the world it gives the priority of its attention and the structuralization of its language. That the view of the world thus obtained is relative, rather than absolute, and incorrect in certain applications is held by many theoretical physicists. Furthermore, it has been noted that the correspondence between the cosmology of mystics and that of contemporary physicists is striking.³² Such a correspondence suggests that the receptive mode of mystic consciousness may have validity in terms of the "external world" if the sector of reality being considered is different from that of the biological with which we are familiar and in which we developed.

Values.—The crises now facing the human race are technically solvable. Controlling population, reducing pollution, and eliminating racism and war do not require new inventions. Yet these problems may prove fatally insolvable because what is required is a shift in values, in self-definition, and in world view on the part of each person—for it is the individual consciousness that is the problem. Our survival is threatened now because of our great success in manipulating our environment and acting on others. The action mode has ruled our individual lives and our national politics and the I-It relationship that has provided the base for technical mastery is now the primary obstacle to saving our race. If, however, each person were able to feel an identity with other persons and with his environment, to see himself as part of a larger unity, he would have that sense of oneness that supports the selfless actions necessary to regulate population growth, minimize pollution, and end war. The receptive mode we have been discussing is the mode in which this identification—the I-Thou relationship—exists and it may be needed to provide the experiential base for the values and world view now needed so desperately by our society as a whole.

Conclusion

I believe it is important that we recognize the relativity of different modes of consciousness rather than assign an absolute primacy and validity to that mode with which we are familiar. The simple dichotomy of receptive and action modes is undoubtedly not a complete inventory of the options available to the human organism. Whether or not we are successful in adopting a variety of appropriate modes of consciousness may well depend on factors with which psychoanalysis is very familiar: defenses against the unknown, against relinquishing conscious control, against the blurring or loss of self boundaries. Perhaps the first step in awarding ourselves new options is to make them legitimate. The limits of what is thinkable tend to be prescribed by the assumptions that permeate a culture. In our own culture mystical means unreal or "kooky," altered states of consciousness are considered "regressive" or pathological, "spiritual" wishes and intuitions are labeled "omnipotent." There are instances where these cultural assumptions are justified but the area encompassed by unusual experiences is much larger than that allotted by such pejorative categories. I hope I have been able to indicate how different states of consciousness can be viewed as organismic modes that may have an important reality-based function necessary for our growth, our vitality, and our survival as a species. Instead of "regression" or "unrealistic" or "autistic," we might better term our organismic options "alternate modes" and be receptive to what they have to teach us.

This study was supported by research grant MH 16793-02 from the Public Health Service and by the Department of Psychiatry, University of Colorado Medical Center.

Drs. I. Charles Kaufman, David Metcalf, and Robert Emde advised in the preparation of this manuscript.

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