Shamans and Acute Schizophrenia[1]

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Acute schizophrenic behaviors in our culture and shaman inspiration-gathering behaviors of certain primitive cultures are considered in terms of several core psychological factors. Significant differences between acute schizophrenics and shamans are not *found in the sequence of underlying psychological events that define their abnormal experiences. One major difference is emphasized—a difference in the degree of cultural acceptance of a unique resolution of a basic life crisis. In primitive cultures in which such a unique life crisis resolution is tolerated, the abnormal experience (shamanism) is typically beneficial to the individual, cognitively and affectively; he is regarded as one with expanded consciousness. In a culture that does not provide referential guides for comprehending this kind of crisis experience, the individual (schizophrenic) typically undergoes an intensification of his suffering over and above his original anxieties.*

THIS paper presents an analysis of the behaviors of shamans with certain personality traits in primitive cultures and of certain schizophrenic individuals in our own. A five-stage cognitive model, utilizing one set of psychosocial premises, purports to explain the etiology and elaboration of both sets of behaviors. Implicit in this formulation is the following basic assumption: the often noted overt similarities between the psychotic-like behaviors of marginally adjusted shamans and of acute schizophrenics reflect even more basic identities in the cognitive processes that generate these behaviors. The principal advantages of this formulation as compared with previous formulations of this problem (e.g., Ackerknecht 1943, Kroeber 1952, Devereux 1956, Linton 1956) lie in the clinical and experimental evidence available to support it and in its greater cross-cultural applicability.

It is important first to define what is meant here by the terms "shaman" and "schizophrenic." A detailed statement should serve to avoid some of the conceptual entanglements that repeatedly arise in this area.

SHAMANISM

The problem of defining what a shaman is and what he is not has long been the subject of controversy. For example, Lowie (1954) defines a shaman as a ceremonial practitioner whose powers come from direct contact with the supernatural by divine stroke rather than from inheritance or memorized ritual. Such a definition is not nearly adequate for an evaluation of the disparate types of behaviors that individuals so labeled exhibit in different cultures. Ackerknecht has argued as follows:

> The mentality of medicine men all over the world, conditioned by their respective culture patterns can hardly be caught by one general label, and least of all by the term shaman, the healed madman . . . nor can the different mentalities be arranged in an evolutionary scheme. It is more or less in the nature of things that the medicine men are autonormal [i.e., normal in the sense of functioning effectively in their own societies; 1943: 53].

Opler (1959) states that the repeated charges that curing shamans are compensated neurotics or psychotics (Kroeber 1952, Devereux 1956, Linton 1956) deserves careful scrutiny since field workers constantly encounter shamans who appear more balanced. Loeb (1929) has differentiated the inspirational medicine man through whom the spirit speaks and who then exorcises and prophesies (i.e., the true shaman) from the noninspirational medicine man with whom the guardian spirit speaks but who does not exorcise or prophesy. Thus in certain cultures (e.g., Chukchee, Eastern Apache tribes, Ute) practically all adults share a proclivity for shaman-like experiences. In other cultures nothing appears to distinguish the designated shaman from the more "ordinary" members of the society in respect to psychological type or psychic peculiarities of major significance (Bourke 1892, Spencer and Gillen 1899, Hallowell 1942). Eliade in his excellent treatise on shamanism (1964) suggests, however, that the label "shaman" be reserved for those medicine men who

can be distinguished from the rest of their community by the *intensity of their mystical experience*. The situation becomes confused even further when one considers that whole societies have been known to conduct everyday activities under what could easily be regarded, from a psychiatric point of view, as altered states of consciousness. For example, among the Tanala of Madagascar and the Mohave of Southwest United States, dream or supernatural experience is often confused with waking life experience to the extent that one may easily be tempted to label these societies and others like them as communities of psychotics (e.g., Benedict 1934).

In order to avoid the pitfalls of previous disagreements, and to highlight the likenesses and differences between shamans and schizophrenics, *this discussion will be primarily concerned with those inspirational medicine men who communicate directly with the spirits and who exhibit the most blatant forms of psychotic-like behaviors*. These include grossly nonreality-oriented ideation, abnormal perceptual experiences, profound emotional upheavals, and bizarre mannerisms. Shamans exhibiting such behaviors are often accorded great prestige, and the belief in their powers is total. For in many a primitive society where the conditions of daily life are harsh, relationships with the environment are closely bound up with the cosmic forces controlling life; the spiritual contacts of the shaman constitute a primary means of sustenance in such a society by their alleviation of the anxieties and fears of its members. Shamanism in all its forms absorbs all that is unpredictable and morally indeterminate (Nadel 1958). When during a "performance" a shaman becomes hysterical in his spirit possession, the members of the group anticipate that they will soon be visited by powerful spirits able to divine their vital problems. When he transports himself to the spirit world to divine or cure, his "returning" pronouncements are received respectfully and obediently.

SCHIZOPHRENIA

Schizophrenia is a general label covering a heterogeneous group of syndromes. Among the prominent clinical features of this group of disorders are: (a) an unmistakable change in personality; (b) autism—nonreality-oriented ideation; (c) "disturbances" of perception; (d) "disturbances" of thinking; (e) profound emotional upheavals; (f) bizarre forms of behavior. In accord with recent perceptual and cognitive research in this area (Silverman 1964b, 1967) and with earlier clinical observations (Sullivan 1953a, Langfeldt 1956), two important restrictions are placed upon the use of the term "schizophrenia" in this paper. The first deals with the distinction between "process" and "reactive" categories of schizophrenics. In the former, the prepsychotic personality is typically more poorly integrated than it is in the latter, there is a continuous and prolonged development of schizophrenic symptoms, and prognosis is poor. More common in the "process" group . . . "is the congeries of signs and symptoms pertaining to an organic, degenerative disease usually of insidious development" (Sullivan 1953a:148). In the "reactive" schizophrenia category, on the other hand, the prepsychotic personality is better integrated, the onset of the disorder rapid, and the clinical picture stormy. For this schizophrenic, "it is primarily a disorder of living. . . . The person concerned becomes schizophrenic—as one episode in his career among others—for situational reasons and more or less abruptly" (Sullivan 1953a:149). This latter schizophrenic condition is the one that will be considered here. For the nonresilient character of the "process" schizophrenic's personality, typically not making for an even marginal adjustment outside of a mental institution setting, is not comparable to the more often remarkably resilient personality of the shaman.

The other important restriction, especially within the "reactive" schizophrenic category, has to do with two contrasting resolutions of the schizophrenic experience: an "essential schizophrenic" (nonparanoid) type and a paranoid schizophrenic type (Sullivan 1953a, 1956). In the former state, the profoundest of emotional upheavals and often abounding religious and magical ideation unfold under conditions of marked environmental detachment. "In the midst of this dreadful experience, the patient is beyond the common place acts by which we live. . . . He does not talk. He does not recognize the personal meaning of other peoples' actions . . . " (Sullivan 1953a:152). Experimental studies of sensory-perceptual functioning in nonparanoid schizophrenic types have yielded results that are consistent with such clinical impressions (Silverman 1964b, 1967). Thus nonparanoid

TABLE 1. A PARTIAL SUMMARY OF SULLIVAN'S CLASSIFICATION OF THE SCHIZOPHRENIAS

Two Unrelated Schizophrenic Syndromes

Organic, degenerative disease, (usually) of insidious origin. Such terms as "simple" schizophrenia or, currently, "process" schizophrenia are typically used here.	" . . . a disorder of living, not of the organic substrate."	
	A. Essential Schizophrenia	B. Paranoid Schizophrenic State
	Cognitive-affective regression.	Cognitive-affective regression.
	Religious and/or magical ideation.	Religious and/or magical ideation.
	Themes of death and rebirth *quite* common.	Themes of death and rebirth *less* common.
	Concentration upon internal, "other world events."	Sudden "understanding." Concretization of the spread of meaning.
	Impersonal, detached orientation toward the world.	Personal and objectified orientation to the world.

schizophrenic types (e.g., catatonic, hebephrenic, acute undifferentiated) have been found to evidence an overtly indifferent orientation to unfamiliar stimuli, a reduced attentiveness to the environment and especially to connotative input, and a tendency to attenuate the experienced intensity of environmental stimulation.

In the paranoid schizophrenic type, the psychotic adjustment is quite different: " . . . the patient, caught up in the spread of meaning, magic, and transcendental forces, suddenly 'understands' it all as the work of some other concrete person or persons" (Sullivan 1953a:135). His focus of attention is thereafter primarily upon environmental events and people (Table 1). In laboratory studies of sensory-perceptual responsiveness, this type of schizophrenic is characteristically overtly responsive to unfamiliar stimulation, extensively scans the environment, especially in the early throes of the paranoid resolution, and evidences a tendency to augment the experienced intensity of environmental input (Silverman 1964b, 1967). This adoption of a concrete, albeit in certain respects grossly distorted environmental orientation is associated with a less favorable outcome than is the case with the essential schizophrenic type. It is as if the paranoid schizophrenic, unable to comprehend or tolerate the stark terrors of his inner world, prematurely redirects his attention to the outside world. In this type of abortive crisis solution, the inner chaos is not, so to speak, worked through *or* is not capable of being worked through.[2] Since the working through of the inner-world experience turns out to be a primary concern in this paper (both for the shaman and for the schizophrenic), the paranoid schizophrenic resolution is considered to be an incomplete one and the essential, nonparanoid schizophrenic form is therefore regarded as more comparable to that of the shaman, the "*healed* madman."

THE THEORETICAL MODEL—AN OVERVIEW

The underlying premise of this paper asserts that both the pathological and the shamanistic types of behaviors and cognition under consideration here are the result of a specific ordering of psychological events. The essential difference between the two lies in the degree of cultural acceptance of the individual's psychological resolution of a life crisis. Thus the same behaviors that are viewed in our society as psychiatric symptoms may, in certain other societies, be effectively channeled by the prevailing institutional structure or may perform a given function in relation to the total culture. The necessary and sufficient sequence of events leading to either a psychotic or a shamanistic resolution is conceptualized in terms of the following five stages:

1. *The Precondition: Fear; Feelings of Impotence and Failure; Guilt.* Clinical and anthropological writings indicate that both the extreme type of shamanistic call and the schizophrenic experience often have as a primary condition the evoking of intense feelings of fear, psychological impotence, failure, and guilt *and consequent seriously damaged self-esteem.* These feelings are the result of inadequate or

incompetent behaviors in life situations that are culturally acknowledged as crucially important.

2. *Preoccupation; Isolation; Estrangement.* The intensity of these feelings becomes the primary source of concern for the preshaman or preschizophrenic, and intense self-absorption results in his becoming increasingly divorced from "social reality." This second phase is characterized by a marked preoccupation with one's personal situation and a psychological state of isolation and estrangement.

3. *Narrowing of Attention; Self-Initiated Sensory Deprivation.* Prolonged self-absorption of the above sort results in the constriction of the *ordinary* field of attention. The intensity of the emotional experience serves to enhance attentional constriction. This altered psychological state brings about changes in perceptual and ideational figure-ground relationships (or "cognitive structures") that are vitally important to one's internal representation of reality. Sustained constriction of the field of attention under these conditions also results in a state of self-initiated sensory deprivation, with consequent inevitable difficulty in the differentiation between phantasy and nonphantasy, between hallucination and perception.

4. *The Fusing of Higher and Lower Referential Processes.* The progressive dedifferentiation of the representations of one's environment and of oneself that occurs under conditions of prolonged constriction of the field of attention and self-initiated sensory deprivation considerably modifies one's perceptual and conceptual experience. The already unstable and weakened "psychological self" is disorganized by this drastically altered environment and is inundated by lower order referential processes such as occur in dreams or reverie. Owing to the depths of the emotional stirring that triggered the whole process, the world comes to be experienced as filled with superpowerful forces and profound but unimaginable meanings.

5. *Cognitive Reorganization.* The psychological resolution of such a state may take any one of a variety of forms and any one of a number of content patterns, but each resolution invariably involves a reorganized set of perceptions and conceptions in which the structure of reality is "something else." However, the new symbolization of reality is not dependent upon the sequence of necessary and sufficient conditions elaborated above, but rather upon the contingencies of existence, which are different for each man in his own milieu.

Much of what follows is concerned with a more elaborate consideration of each of these five stages.

Stage 1. The Precondition: Fear; Feelings of Impotence and Failure; Guilt

In those areas of an individual's life where chance and circumstance play a prominent part and where he is unable to bring his environment under his direct control, contact is sought with various supernatural forces that are assumed to exercise that control. The ideas concerning causality that are generated by this approach to a "condition of psychological impotence" are most often considered as purely personal and as nonreal by "high" cultural standards. On the other hand, in those aspects of his life in which he is able to exercise control, he is not nearly so motivated to seek supernatural contact. Furthermore, in time of crisis, when a person is face to face with the issues of life and death, with success and utter failure, attention also becomes focused on such cosmic problems as why he is in the world and that of his relationship with the forces upon which he feels dependent.

An individual diagnosed as psychotic in our culture exhibits and experiences nothing that is specifically different from what is manifested by any other human being who has been oversensitized by *extreme* and *prolonged* threat. It is suggested that what is encountered in various stages of schizophrenia and in the forms of shamanism under consideration here—the odd, awe-inspiring, terror-provoking feelings of vastness and littleness, the strange comprehending of things and events—begins with a subjective evaluation of oneself as being incapable of exercising any effective control over a current life situation. Clinicians have often noted that schizophrenics give evidence of having had some unsolved or traumatic problem prior to the disorder that arouses a strong emotional reaction. Invariably this problem involves a feeling of personal inadequacy occurring in an already hypersensitive and often introverted person (Boisen 1936, 1942, 1947; Sullivan 1953a, 1956; Kaplan 1964). The inability to solve the problem or to extricate oneself from the situation gives rise

to an intolerable sense of inner disharmony and frustration—a feeling of impotence in being unable to master the disturbance. This inability to cope with one's world may give rise also to a strong sense of guilt (e.g., I must be wicked if this state of affairs exists).

Comparable psychological conditions have been recorded among prospective shamans (Bogoras 1909; Benedict 1934; Linton 1956; Eliade 1958, 1964).

> As one reads accounts of the "making of shamans," one finds that there take place certain uniform, or almost uniform, experiences. For example, the shaman as a child usually shows marked introvert tendencies. When these inclinations become manifest, they are encouraged by society. The budding shaman often wanders off and spends a long time by himself. He is rather antisocial in his attitudes and is very frequently seized by mysterious illnesses of one sort or another [Linton 1956:124].

> To people of more mature age [among the Chukchee], the shamanistic call may come during some great misfortune, dangerous and protracted illness, sudden loss of family or property, etc. Then the person, having no other sources, turns to the spirits and claims their assistance [Bogoras 1909: 421].

> It is also considered perfectly natural that a young boy should try to call the spirits. . . . In the same way a number of Chukchee tales tell of young orphans, despised and oppressed by all their neighbors, who call to the spirits and with their assistance become strong men and powerful shamans [Bogoras 1909:424].

> . . . the shamanic vocation often implies a crisis so deep that it sometimes borders on madness. And since the youth cannot become a shaman until he has resolved this crisis, it plays the role of a mystical initiation [Eliade 1958:89].

Devereux (1961) has viewed this choice of the shaman's way of life as a less risky resolution of a life crisis than a "choice," by one living in the same society, of neurosis or psychosis. The preshaman is thought to be able to manage such an adjustment because he is insufficiently acculturated. While Devereux's notions of what is and what is not acculturation are quite different from this author's,[3] our basic orientations are in accord: shamanism is regarded as a total psychological adjustment to a condition of extreme threat, in which one is provided with an alternative to more drastic (i.e., culturally less acceptable) forms of deviancy. By "extreme threat" is meant that psychological state in which one perceives oneself as being unable (a) to attain what are culturally acknowledged as the basic satisfactions or (b) to solve the culturally defined basic problems of existence. In this condition, one invariably experiences a sense of personal failure and inadequacy. Any subsequent deviant behaviors that occur because of this psychological state will inevitably bear the influence of the culture in which they emerge.

In a penetrating analysis of the issue, Wallace elaborates upon this problem as follows:

> It may be taken as axiomatic that it is the concern of all human beings to maintain an image of themselves as persons competent to attain their essential goals, including maintenance of group membership. Such self-image in part is dependent on the individual's evaluation of his own behavior, and in part on the evaluation of this behavior which is communicated to him by others. Shame—. . . whether growing from self-observation or information from others—may arouse so much anxiety as to inhibit further the person's competence. . . . Whenever a culture defines a given item of behavior as a symptom of general incompetence, the individual so behaving will suffer from shame, which elicits anxiety. . . . To the extent that a society stresses failure in a given area of behavior as symptomatic of a more generalized inadequacy, and to the extent that that behavior requires minimal anxiety [or physical competence] for successful performance, failure in such behavior probably will be repeated and will increasingly extend over other behaviors. Such reciprocal processes of shame, anxiety, and incompetent behavior are recognized today in our own mental hospitals, where patients are found to respond dramatically to almost any treatment which is carried on in an atmosphere of confidence in the ability of the patient to regain competence [1961:182–184].

Wallace conceives of the process of becoming a shaman as an instance of "mazeway resynthesis." This term refers to the sudden reorganization of one's mode of structuring the world in an attempt to make sense of a highly anxiety-provoking environment. It thereby serves a highly therapeutic function. The therapeutic value of the shamanistic inspiration experience, however,

> depends both on the resources of the individual and on the support his effort is given by the community. The culture enters into the process here, rather evidently, by imposing certain evaluations on the content of such experiences as well as on their form. . . . The existing cultural milieu can act as a support or a hindrance to the mazeway

resynthesis process by facilitating or suppressing the institutionalization of behavior patterns and beliefs conceived in the course of such experiences [Wallace 1961:192].

This position is clearly a more parsimonious and theoretically consistent one than the more involved, and often circular conceptualizations of Kroeber, Linton, and Devereux, who have emphasized the mental derangement aspects of shamanism. Devereux, for example, argues that even though the shaman's position is institutionalized, it is "ego dystonic" and often also "quite obviously culture dystonic" (1956:29). Kroeber (1952) regards the shaman as "less insane" than individuals whom their societies consider psychotic. Linton (1956) also suggests that the shaman is "less crazy" than the recognized psychotic and that he is usually hysterical in personality structure.[4]

Stage 2. Preoccupation; Isolation; Estrangement

Both the schizophrenic's experience and the shaman's "answering the call" begin with a marked preoccupation with their personal situations and with emotions so intense that they are carried, as it were, into another world. This experience comes about in an abrupt and obscure manner. Often, the experience is activated by various omens, such as participating in or seeing a certain event take place, having a dream, finding an object of some peculiar form, etc. "Each of these omens has in itself nothing extraordinary but derives its significance from its mystical recognizance in the mind of the person to whose notice it is brought" (Bogoras 1909:418). The consequent self-absorption results in longer and longer breaks in the normal process of communication and social interaction. An outstanding characteristic is the sense of isolation and estrangement, which makes social interaction progressively more difficult.

To feel oneself cut off from those with whom one seeks identification is death. . . . It appears to be just as important for an individual to feel himself part of the social organism as for a cell to be a functioning unit in the body to which it belongs [Boisen 1936:150].

This observation is consistent with Sullivan's (1953a, 1956) and others' (e.g., Perry 1962) comments on the schizophrenic experience. It is also consistent with the work of Eliade (1958, 1964), who, in summarizing studies of shamanism the world over (e.g., in Africa, Australia, North America, Siberia), notes the very common belief among shamans in their own deaths and mystical transfigurations occurring just prior to taking on their new identities.

During this period of intense personal preoccupation one tends to become absorbed in a narrow circle of ideas. In most cases this is accompanied by a loss of sleep carried to the point where the boundaries between sleep and waking are lost. Sullivan, in his discussion of the individual in the early throes of the schizophrenic state, writes: "His awareness is now that of a twilight state between waking and dreaming: his facial expression is that of absorption in ecstatic inner experiences, and his behavior is peculiar to the degree that he no longer eats or sleeps, or tends to any of the routines of life" (1953a:133). Highly similar kinds of experiences among budding shamans have been reported by field workers in many primitive cultures, for example, among the Sedang Moi, the South African Bantu, the Eskimos of the Arctic, in Indonesia, in Siberia (Bogoras 1909; Ackerknecht 1943; Eliade 1958, 1964). Clinical and anthropological observations also suggest that a kind of autohypnotic state is common under these conditions (Bogoras 1909; Benedict 1934; Boisen 1936; Roheim 1952; Eliade 1958, 1964; Kaplan 1964). The principle behind the induction of autohypnosis is one of perceptual fixation, and some of its behavioral manifestations are apparent in the pathological staring of schizophrenics and novice shamans or in the total attentiveness of certain shamans to their frenzied, prolonged drum beating or whistling.

Stage 3. Narrowing of Attention; Self-Initiated Sensory Deprivation

There is impressive experimental evidence suggesting that prolonged perceptual fixation may readily lead to two highly significant kinds of alterations in one's characteristic manner of experiencing the world. The first has to do with changes in attention and is well illustrated by the laboratory research of Piaget (1950), Gardner *et al.* (1959), and their collaborators. They have presented experimental evidence indicating that persons who fixate upon stimulus patterns (e.g., illusions, size judgments) to an excessive degree show more distortion or inaccuracy than those who vary their attention to the different aspects of

the stimulus field. It is suggested here that the altered perceptions and cognitions of the schizophrenic and budding shaman evolve out of (a) their constriction of the range of stimulus input to which they are responsive and (b) their intense absorption with a *narrow* circle of ideas. The latter most often are either newly acquired or are accentuated through physical illness or self-evaluated failure and impotence.[5] This extreme mode of narrowing attention changes both sensory and ideational figure-ground relationships and hence the cognitive structural relationships acquired over the course of psychological development.

Extreme narrowing of attention also initiates a second significant psychological effect in which sensory input is markedly reduced, that is, a state of self-initiated sensory deprivation. This condition violates the organism's constant need to maintain perceptual variability (McReynolds 1960). Studies in sensory deprivation indicate that the phenomenological effects of sensory deprivation are strikingly similar to those reported by shamans and schizophrenics. For example, one report (McFann and Green 1962) notes subjects' confusion about the boundaries between wakefulness and dreaming sleep, between fantasy and reality, between self and nonself. Another study, presented at the Harvard Symposium (Solomon *et al.* 1961), notes the "difficulties" in perception and cognition that occurred after several hours under one type of sensory deprivation condition (e.g., "my arms seemed to be dissociated from my body"; "my body seemed to become much smaller"). A number of subjects experienced hallucinations and delusions centering around themes of destruction. Some gradually began to believe that perceptual illusions and images were outside of themselves, not their own creations. The content of the imagery often seemed to be unrelated to the individual's prior personal experiences.

In a most sophisticated theoretical treatment of sensory deprivation-induced behavior, Freedman *et al.* (1961) have suggested that perceptual and cognitive distortions inevitably occur when an individual, in his continuous automatic search for order and meaning, suddenly finds himself in a nonordered perceptual environment. This is exactly the psychological state that evolves in an isolated, preoccupied, and sensorily self-constricting shaman or schizophrenic. According to Freedman *et al.*, the everyday behaviors of waking life are possible only because of an ongoing process that seeks continuously and automatically to find ordered relationships in the perceptual environment. Whereas ordinarily one is continually imposing structure on a fluid but familiar environment according to learned sets of relationships that have proved dependable and useful, the sensorily deprived or self-sensorily deprived individual finds it increasingly difficult, and finally impossible, to achieve such constancies and stabilities in a nonordered sensory environment. Since perceptual and conceptual structures are developed and maintained only by seeking out meaningfully organized sensory input, reality —the old perceptual and conceptual reality— will begin to break down under prolonged sensory deprivation (Rapaport 1960). Under these conditions one's previous experiences and accepted standards do not apply. One sees strange meanings in everything about one, and one will soon be sure of only one thing— that events, people, and places are not what they seem.

Experimentally this has been demonstrated in attenuated form by changes in perceptual responses to stimulus patterns, as well as by subjective reports from persons exposed to sensory deprivation conditions (e.g., the contours of ambiguous figures alternate relatively extremely rapidly; simple geometric forms change their size and shape). "Our data imply that these effects are produced by the release of tendencies inherent in the primitive process but held in check by a process of stabilizing the visual field" (Freedman *et al.* 1961:70–71).

The main point being emphasized here is that the abnormal behaviors of the schizophrenic and the shaman are the result of a specific psychological process. This process involves extreme "styles" of attention deployment, marked withdrawal from ordinary kinds of activities, and, simultaneously, a marked reduction in meaningful sensory (i.e., perceptual) input.

Stage 4. The Fusing of Higher and Lower Referential Processes

> What we discover in the self-system of a person undergoing schizophrenic change or schizophrenic processes is . . . in its simplest form, an extremely fear marked puzzlement, consisting of the use of rather generalized and anything but exquisitely refined referential processes in an attempt to cope

> with what is essentially a failure at being human—a failure at being anything that one could respect as worth being [Sullivan 1956:184–185].

The crises facing preshamans and preschizophrenics on their brinks of chaos may be viewed as revolving around a severely damaged conception of self (Sullivan 1953a, Wallace 1961:183–184 [quoted above], Perry 1962). From this perspective their mental abnormalities are regarded as the *result* of a desperate attempt at redefinition of a personally meaningful and adequate self-concept. Since these redefinitions are intrinsically related to personal conceptions of "what reality is" (Mullahy 1953, Sullivan 1953b), *the fragmentation of one's self-concept in the course of redefinition also implies a fragmentation of reality as it has been culturally elaborated by and for the individual.*

Perry (1962) has conceived of the impetus for this type of cosmic crisis as a division between two forms of the self-image—the one in the usual sense of the way the person views and evaluates himself, the other, an archaic image/emotion sequence (archetype). The former self-image is that of being faulty, undesirable, unworthy, and unpromising. The latter is made up of a compensating archetypal imagery/emotion of being superlative, more than human, or a person of momentous importance to the world. "The discrepancy between the two self-images in their counterpoise sets up an unstable psychic situation full of a sense of unreality and anxiety" (Perry 1962:869).

What follows then is the eruption into the field of attention of a flood of archaic imagery and attendant lower-order referential processes such as occur in dreams or reverie (e.g., association of ideas by contiguity or *pars pro toto* condensation, displacement). Ideas surge through with peculiar vividness as though from an outside source. The fact that they are entirely different from anything previously experienced lends support to the assumption that they have come from the realm of the supernatural. One feels oneself to be dwelling among the mysterious and the uncanny. Ideas of world catastrophe, of cosmic importance, and of mission abound. Words, thoughts, and *dreams* can easily be seen to reside in external objects.[6] Causal relationships are perceived against a background of magic and animism. Everything is now capable of being related to everything else in terms of a mental orientation that is grossly subjective. New ideas, crowded in upon the anxious individual, are experienced as real things. Reality becomes something else. Chaos prevails.

Eliade writes:

> The total crisis of the future shaman, sometimes leading to complete disintegration of the personality and to madness, can be valuated not only as an initiatory death, but also as a symbolic return to the precosmogonic chaos, to the amorphous and indescribable state that precedes any cosmogony . . . [1958:89].

Sullivan describes a comparable state in the schizophrenic:

> The experience which the patient undergoes is of the most awesome, universal character; he seems to be living in the midst of struggle between personified cosmic forces of good and evil, surrounded by animistically enlivened natural objects which are engaged in ominous performances that it is terribly necessary—and impossible—to understand . . . [1953a:151–152].

Two different interpretations of such psychic upheaval warrant consideration. On the one hand, it may be taken to signify the loss of control over the contents of awareness (e.g., Sullivan 1956) and be considered to be of primarily negative import. On the other hand, if one conceives of the total psyche as a self-regulating system, the eruption of ordinarily unconscious (dream-like) imagery is, under such crisis conditions, deemed to be absolutely necessary for restoring balance and wholeness to the system (e.g., Adler 1948). The latter interpretation is clearly well suited as an interpretation of the shamanistic experience—the experience of the (soon to be) "healed madman." But what of the schizophrenic episode?

It is at this point that consideration of the cognitive/affective experiences of the schizophrenic and of the shaman need to be given within separate frames of reference. Whereas the initial shamanistic experience is most often highly valued and rewarded in primitive society, no such institutional supports are available for the schizophrenic in modern society. The social role of the shaman has legitimated within it free access to lower referential processes. For the schizophrenic, the absence of such culturally acceptable and appropriate referential guides only has the effect of intensifying his suffering over and above the original anxieties. There are simply too few acceptable or realistically valid concepts available with which to label these

unusual feelings and beliefs. It is not surprising then that guilt—the internalization of negative feelings regarding nonadherence to societal standards—is intensified where social standards of behavior prohibit such types of life-crisis resolutions.

Note here also that these crisis resolutions are grossly aberrant and inaccurate ones only in cultures maintaining definitions of "reality" that are different from ours. Thus, for example, when a beetle or a small louse is found in the wilderness and "shown" to be of a supernatural kind, as in several Chukchee myths, who among the Chukchee will argue that the possessor does not thereby acquire immense shamanistic power? These revelations clearly serve their adaptive ends not by providing an accurate translation of reality (for what is reality except what a culture states it to be), but rather by effecting what Klein (1958) has called a "workable fit" between personal need and personal perception and the demands of the environment. If reality-testing, as a theoretical construct, is to have any sensible usage in psychosociocultural theory, then it must refer only to the effective coordination between the properties of things and a given culture's various concepts and perceptions of these properties.

Stage 5. Cognitive Reorganization

The mental and emotional reorganization that the shaman undergoes in the course of his life occurs according to a more or less accepted pattern—that is, once it has been set in motion by the shamanistic call and once enough shamanistic "inspiration" has been gathered. Even in the trance the individual holds to the rules and expectations of his culture (Benedict 1934).

The high regard in which the shaman is held stems principally from the fact that

> he has succeeded in integrating into consciousness a considerable number of experiences that, for the profane world, are reserved for dreams, madness, or post-mortem states. The shamans and mystics of primitive societies are considered—and rightly—to be superior beings; their magicoreligious powers also find expression in an extension of their mental capacities. The shaman is the man who *knows* and *remembers*, that is, who understands the mysteries of life and death. . . . He is not solely an ecstatic but also a contemplative . . . [Eliade 1958:102].

The degree of prestige acquired by the shaman also depends in part upon the successful outcome of his pronouncements and mystical performances. He must therefore be capable of a rather high degree of flexibility in the sense of being able to attend to the needs of both his "clients" in the physical world and his "spirits" in the other world. Often the shaman's ritual tricks, performed during his trancelike ecstasy states, require an extraordinary amount of physical and psychological control. Also, he must be continually able to "enter" and "return" from the far-flung reaches of the cosmos. Thus it appears that many of his remarkable feats of skill require as a precondition a significantly altered psychic state. Similar kinds of ritualistic behavior when performed by a person in a schizophrenic state lead to absolutely nothing at all that has cultural significance, other than as verification of his insanity. (Such feats of physical dexterity—of balancing and ritualistic dance—have been repeatedly noted in the past among catatonic schizophrenics, e.g., Sullivan 1956.)

In contrast to the shaman, the chances of the schizophrenic achieving a successful readaptation are comparatively small. For the crisis solutions of the schizophrenic are totally invalid ones in the eyes of the great majority of his peers. Thus, somewhere along the way he must resolve the additional problem of whether his new insights are "better" or "worse" than the more culturally appropriate ones. Where his life situation is essentially lacking in constructive premorbid factors with no apparent consensually valid solutions in sight—where there is little to come back to—then the prognosis for a prolonged "return" is poor (Boisen 1936).

The essential difference between the psychosocial environments of the schizophrenic and the shaman lies in the pervasiveness of the anxiety that complicates each of their lives. The emotional supports and the modes of collective solutions of the basic problems of existence available to the shaman greatly alleviate the strain of an otherwise excruciatingly painful existence. Such supports are all too often completely unavailable to the schizophrenic in our culture.

NOTES

[1] A considerable portion of this paper represents an integration of some of the ideas of Harry Stack Sullivan and Anton Boisen with some recent developments in perceptual, cognitive, and clinical research. It was begun during the term of a Uni-

versity of Michigan predoctoral fellowship from the National Institute of Mental Health. It was completed during a Psychology Research Associateship at the Palo Alto V.A. Hospital. The author wishes to thank David Bordua, Kenneth Colby, Eric Wolf, and especially Margaret Singer for their suggestions and criticisms.

[2] Some recent studies of types of reactions to the psychotomimetic drug LSD 25 are most interesting in this regard. Profound essential schizophrenic-like LSD reactions are evidenced in these studies by individuals with leptosome body types more than by individuals with pyknic body types, by "schizothymic"-type individuals more than by "cyclothymic"-type individuals, by introverted nonclinical subjects more than by extroverted nonclinical subjects (Barendregt and Van Ree 1961, Hiroshi Kuramochi and Ryo Takahashi 1964). Each of the latter types more typically evidenced an LSD reaction comparable to that of the paranoid schizophrenic state. Such findings suggest that a temperament or innate personality factor may be involved in determining the final form of the schizophrenic resolution. Sullivan (1953a) seems to have regarded this problem mainly from an interpersonal viewpoint; for example, he writes: "The stress of this sort of life [the schizophrenic experience] is very great. For those whose personal history permits it, the elaboration of a paranoid distortion of the past, present, and future comes as a welcome relief" (1953a:155).

[3] Implicit in the very idea of a social system is that whatever is found in it is related to the total structure. Therefore, any culturally defined institution—and shamanism is a social institution—cannot be regarded as unacculturated. R. M. MacIver (1942:88) states this issue as follows: "When a social phenomenon is defined by law, convention or any institutional procedure, we should not assume that it can be referred to any one set of sources lying outside of the institutional system itself." Thus what Devereux fails to consider in his conception of the unacculturated shaman is that the same pressures and strains that help to produce "acceptable" and "desirable" behaviors in a society also operate to produce deviant behaviors.

[4] Careful analysis of such diagnostic or pseudomedical terms as "culture dystonic" or "less insane" suggests that they are overly complicated ideas and extremely difficult to pin down, especially in this context. As understood in relation to a discussion of shamanism, they appear to refer to little more than differences in social desirability between the roles of nondeviant, shaman, and psychotic. Consider also that even in making a differential diagnosis between hysteria and schizophrenia, not in a strange culture but in our own, the clinician may be faced with an extremely difficult task (e.g., Abse 1959). More elaborate discussions of the vagaries of cross-cultural diagnosis are contained in recent papers by Brody (1964) and Rinder (1964).

[5] In acute forms of paranoid schizophrenia, as contrasted with other schizophrenic subtypes, there is ordinarily no constriction or narrowing of perceptual responsiveness (see Silverman 1964a, 1964b). Rather there is a pronounced narrowing of attention upon the ideas that are the nucleus of the delusional system.

[6] Roheim writes: "*It is clear that the shaman is simply the dreamer only more so . . .* " (1952: 221–222). And Sullivan: "In the schizophrenic state the patient is profoundly preoccupied with regaining a feeling of security. The processes by which the self dynamism pursues this goal are of the sort rarely manifested after early childhood, except in sleep" (1953a:150).

REFERENCES CITED

ABSE, D. W.
1959 Hysteria. *In* The American handbook of psychiatry, vol. 1. S. Arieti, ed. New York, Basic Books.

ACKERKNECHT, E. H.
1943 Psychopathology, primitive medicine, and primitive culture. Bulletin of History of Medicine 14:30–67.

ADLER, G.
1948 Studies in analytic psychology. New York, Norton.

BARENDREGT, J. T., AND F. VAN REE.
1961 Prediction of the nature of reaction to LSD 25. *In* Psychological studies I, Research in diagnostics. J. T. Barendregt, ed. The Hague, Mouton.

BENEDICT, R.
1934 Patterns of culture. Boston, Houghton Mifflin.

BOGORAS, W.
1909 The Chukchee. Memoirs of the American Museum of Natural History, Vol. XL. New York, Leiden.

BOISEN, A.
1936 The exploration of the inner world. New York, Harper.
1942 The form and content of schizophrenic thinking. Psychiatry 5:23–33.
1947 Onset in acute schizophrenia. Psychiatry 10:159–166.

BOURKE, J. G.
1892 The medicine men of the Apache. BAE-R, p. 460.

BRODY, E. B.
1964 Some conceptual and methodological issues involved in research in society, culture and mental illness. Journal of Nervous and Mental Disease 139:62–74.

DEVEREUX, G.
1956 Normal and abnormal: the key problem of psychiatric anthropology. *In* Some uses of anthropology: theoretical and applied. J. B. Casagrande and T. Gladwin, eds. Washington, Anthropological Society of Washington.
1961 Mohave ethnopsychiatry and suicide: the psychiatric knowledge and the psychic disturbances of an Indian tribe. Washington, Smithsonian Institution.

ELIADE, M.
1958 Birth and rebirth. New York, Harper.
1964 Shamanism: archaic techniques of ecstacy. New York, Pantheon.

FREEDMAN, S. J., H. U. GRUNEBAUM, AND M. GREENBLATT.
1961 Perceptual and cognitive changes in sensory deprivation. *In* Harvard Medical School symposium on sensory deprivation. P. Solomon *et al.*, eds. Cambridge, Harvard University Press.

GARDNER, R. W., P. S. HOLZMAN, G. S. KLEIN, H. B. LINTON, AND D. P. SPENCE.
1959 Cognitive control: a study of individual consistencies in cognitive behavior. Psychological Issues, No. 4.

HALLOWELL, A. I.
1942 The role of conjuring in Salteaux society. Philadelphia, University of Pennsylvania Press.

KAPLAN, B., ED.
1964 The inner world of mental illness. New York, Harper and Row.

KLEIN, G. S.
1958 Cognitive control and motivation. *In* The assessment of human motives. G. Lindzey, ed. New York, Rinehart.

KROEBER, A. L.
1952 The nature of culture. Chicago, University of Chicago Press.

KURAMOCHI, H., AND R. TAKAHASHI.
1964 Psychopathology of LSD intoxication. Archives of General Psychiatry 11:151–161.

LANGFELDT, G.
1956 The prognosis in schizophrenia. Acta Psychiatrica Scandinavia, Suppl. 110.

LINTON, R.
1956 Culture and mental disorders. Springfield, Ill., C C Thomas.

LOEB, E. M.
1929 Shaman and seer. American Anthropologist 31:60–84.

LOWIE, R. H.
1954 Indians of the plains. New York, McGraw-Hill.

McFANN, H. H., AND C. E. GREEN.
1962 U. S. Army Leadership Human Research Unit. Quarterly Research Report, January-March, Presidio of Monterey, California.

MACIVER, R. M.
1942 Social causation. Boston, Ginn & Company. Quoted from 1964 edition, New York, Harper Torchbooks.

MCREYNOLDS, P.
1960 Anxiety, perception and schizophrenia. *In* Etiology of schizophrenia. D. Jackson, ed. New York, Basic Books.

MULLAHY, P.
1953 The theory of interpersonal relations and the evolution of personality. *In* Conceptions of modern psychiatry. H. S. Sullivan, ed. New York, W. W. Norton.

NADEL, S. F.
1958 A study of shamanism in the Nuba Mountains. *In* Reader in comparative religion. W. A. Lessa and E. Vogt, eds. New York, Row, Peterson & Co.

OPLER, M. K.
1959 Culture and mental health. New York, Macmillan.

PERRY, J. W.
1962 Reconstitutive process in the psychopathology of the self. Annals of the New York Academy of Sciences 96:853–876.

PIAGET, J.
1950 The psychology of intelligence. London, Routledge and Kegan Paul.

RAPAPORT, D.
1960 On the psychoanalytic theory of motivation. *In* The Nebraska symposium on motivation. M. R. Jones, ed. Lincoln, University of Nebraska Press.

RINDER, I. D.
1964 New directions and an old problem: the definition of normality. Psychiatry 27:107–115.

ROHEIM, G.
1952 The gates of the dream. New York, International Universities Press.

SILVERMAN, J.
1964a The scanning control mechanism and "cognitive filtering" in paranoid and nonparanoid schizophrenia. Journal of Consulting Psychology 28:385–393.
1964b The problem of attention in research and theory in schizophrenia. Psychological Review 71:352–379.
1967 Variations in cognitive control and psychophysiological defense in the schizophrenias. Psychosomatic Medicine. In press.

SOLOMON, P., P. E. KUBZANSKY, P. H. LEIDERMAN, J. H. MENDELSOHN, R. TRUMBULL, AND D. WEXLER, EDS.
1961 Harvard Medical School symposium on sensory deprivation. Cambridge, Harvard University Press.

SPENCER, B., AND F. J. GILLEN.
1899 The native tribes of Central Australia. New York, Macmillan.

SULLIVAN, H. S.
1953a Conceptions of modern psychiatry. New York, Norton.
1953b The interpersonal theory of psychiatry. New York, Norton.
1956 Clinical studies in psychiatry. New York, Norton.

WALLACE, A. F. C.
1961 Culture and personality. New York, Random House