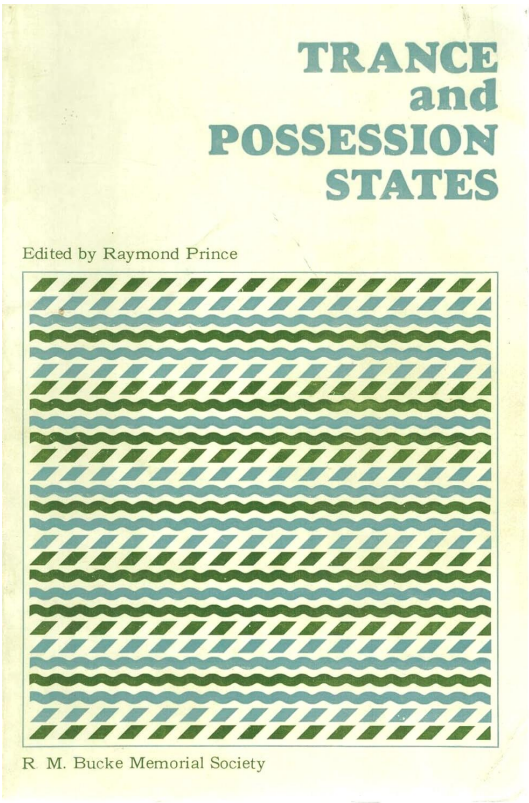
Trance and Possession States

Raymond H. Prince



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Preface

The R. M. Bucke Memorial Society was founded in the summer of 1964 and is devoted to the study of areas common to religion and psychiatry, particularly to the study of mystical or transcendental states of consciousness.

The society commemorates a distinguished nineteenth-century Canadian psychiatrist. A graduate of the McGill Medical School, Dr. Bucke was a pioneer in the movement towards humane treatment of the mentally ill. He was superintendent of the Ontario Hospital, London, for twenty-five years and a president of the American Medico-Psychological Association. Bucke was also interested in mystical experience and wrote several papers and books on the subject, including the well-known *Cosmic Consciousness.*

It might be asked why a society devoted to the study of mystical states should interest itself in possession states. At first glance there seems to be little similarity: the one suggesting a solitary illumination, the other an orgiastic dance. And yet there are basic similarities. The most obvious is the belief of those involved that these states represent the point of intersection of the human and the divine. Mystical states are believed by many to be the experience of the self in the presence of God; or to represent the immersion of the personal ego within the Infinite, a fusion of the self with the One. Possession states too, are regarded as circumstances in which a spirit or minor deity takes control, or, as it is frequently formulated, mounts and directs the devotee.

Both states, moreover, are considered to be psychotherapeutic. The *Bhagavad Gita* says regarding the mystical state, *samadhi:*

> When one thoroughly abandons all cravings of the mind, and is satisfied in the self, through the self, then he is called stable of mind... The self-controlled practitioner, while enjoying the various sense objects through the senses, which are disciplined and free from likes and dislikes, attains placidity of mind. With the attainment of such placidity of mind, all his sorrows come to an end and the intellect of such a person of tranquil mind soon withdraws itself from all sides and becomes firmly established in the supreme reality.

Many authors have pointed out that apart from any supernatural attributes, mystical experiences often result in states of placidity and well-being which sound very much like good mental health. Possession states too, as will become apparent during this present conference, may be psychotherapeutic. In many cultures, the emotionally

disturbed are directed by their healer-priest to join possession cults in order to be healed.

Both kinds of states are, in fact, alterations of consciousness. There are, of course, differences in the level or quality of consciousness. In most possession states the individual, when he returns to normal consciousness, forgets what happened during the possession state; he is simply aware of having lad a lapse. On the other hand, mystical states occur in a clearer state of consciousness, and there is some degree of recollection. The experience during the mystical state, however, is difficult to describe; the ineffable quality of mystical states is well known.

In the spite of these differences, descriptions of the entry into the two states are sometimes similar. Consider the following two descriptions; one refers to a Voodoo possession state, the other to a mystical state:

> There is no way out. The white darkness moves up the veins of my leg like swift tide rising, rising; is a great force which I cannot sustain or contain, which surely will burst my skin. It is too much, too bright, too white for me; this is darkness. 'Mercy!' I scream within me. I hear it echoed by the voices, shrill and unearthly; 'Erzulie.' The bright darkness floods up through my body, reaches my head, engulfs me. I am sucked down and exploded upward at once. That is all.[1]

> It was as if houses, doors, temples and everything else vanished all together, as if there was nothing anywhere! And what I saw was an infinite shoreless sea of light; a sea that was consciousness. However far and in what direction I looked, I saw shining waves, one after another, coming towards me. They were raging and storming upon me with great speed. Very soon they were upon me; they made me sink down into unknown depths. I panted and struggled and lost consciousness.[2]

The first of these describes Maya Deren's entry into a Voodoo possession state. The second describes Ramakrishna's entry into *samadhi.* The similarity is striking.

It is true that there is often a difference in the setting in which the two states occur. Typically, mystical states are sought through medication, mortification, and solitude; possession states, on the other hand, generally occur as a group phenomenon, and there is often drumming, music, and dancing. Yet in certain cults this distinction becomes blurred. For example, Sufi practices otherwise representative of the mystical experience, are often accompanied by dance and music. Listen to Landolt's description:

> On several occasions, Sufis used to sit together and to listen to a singer reciting profane or mystical love poetry, until one or the other rose up in ecstasy, sometimes tearing up his garb. Simulation of ecstatic movements

[1] Deren, M. (1953) *Divine Horsemen. The Living Gods of Haiti.* London: Thames and Hudson.
[2] Isherwood, C. (1965) *Ramakrishna and His Disciples.* New York: Simon and Schuster.

(tawajod) was also allowed, in order to induce real ecstasy. In certain groups, there exists in connection with listening to music dance ritual.[3]

The idea upon which this conference is based, then, is that possession states are to the more archaic forms of religious life what mystical states are to its more evolved forms. It is to be hoped that, as well as expanding our knowledge of the nature of possession states and primitive religions, we may, by throwing light on the more primitive states, also illuminate the meaning and function of mystical states.

RAYMOND PRINCE, M.D.
President

[3] Landolt, H. (1965). Mystical Experience in Islam, in Personality Change and Religious Experience, Proceedings of the First Annual Conference, R. M. Bucke Memorial Society, Montreal.

Acknowledgments

The generous financial support of the Parapsychology Foundation and of the Aquinas Fund is gratefully acknowledged.

Dr. William Sargant kindly agreed to introduce the conference by si owing and discussing his excellent collection of films demonstrating possession states in the West Indies and in various African countries, as well as in England and the USA. Professor Werner Cohn gave us an impromptu report of his work on glossolalia and personality which is being conducted at the University of British Columbia. He illustrated his discussion with a film showing glossolalia as he has been able to produce it in the laboratory. Through the courtesy of Mr. and Mrs. Lawrence K. Marshall we were able to view their excellent film on Bushman trance states which Richard Lee used to illustrate his paper.

Mr. J. A. Zielinski handled the complex audio-visual components on the conference. Prof. H. B. M. Murphy gave us much helpful advice. Linda Parsons, Grace Prince, and Clifford Brown helped in a variety of ways.

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Part I: the Phenomena: Distribution and Patterns

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World Distribution and Patterns of Possession States[1]

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Before beginning our discussion of world distribution and patterns of possession states, we shall need to introduce some distinctions and definitions and to indicate just what sort of states and beliefs we shall be talking about. As far as world distribution of these states is concerned, our program will take us to the Bushman, to northern India, to Haiti, to Nigeria, and to Iran, as well as to various times and places of the Western world. This fact alone seems to indicate a very broad range indeed. We shall, therefore, consider some distribution maps, later on, which will attempt to provide geographic orientation for our discussions.

For almost three years a group of us at Ohio State University has been involved in a broadly conceived cross-cultural study of dissociational states and of the explanatory systems to which they are linked in the societies in which they occur. We discovered early in our investigations that dissociation or trance, itself a complex and variable phenomenon, might or might not be interpreted and experienced as possession in a particular society, and that the concept of possession, in turn, might or might not be utilized to account for forms of behavior other than those of dissociation. We have, herefore, found it useful in our work to distinguish between trance behavior and associated beliefs on the one hand (as represented in Table I) and possession beliefs and associated behavior on the other (as represented in Table II).

The two categories meet and overlap in the constellation which will concern us most in the discussions of this conference, namely trance behavior linked to possession belief. These states we shall refer to in the following pages as states of 'possession trance'. We shall return to this in a moment.

Tables I and II represent an attempt to bring some order into the vast quantities of highly varied materials that we have encountered in an analysis of descriptive accounts of some seven hundred cultural groups from all parts of the world. In these accounts, the terms 'trance' and 'possession' recur, but seem to refer to a variety of phenomena.

[1] This investigation was supported in whole by Public Health Service Research Grant MH 07463–03 from the National Institute of Mental Health.

We have attempted to organize our materials to show what conceptual relations, if any, exist between them.

Explanations of Trance Behavior: Naturalistic and Supernaturalistic

We may begin, then, with a closer look at Table I. Here we are concerned with a somewhat heterogeneous class of behavioral patterns, for which we have decided to use the term 'trance', and with the ways in which this class of behavioral patterns is interpreted or explained. We are concerned with the interpretations which are current in the societies in which the behavior is found, rather than with interpretations which claim to be supra-cultural or extra-cultural, such as those which we, as Western anthropologists or psychiatrists, might make. We are not asking here how we would interpret, for example, Yoruba trance behavior; but rather how, on the one hand, the Yoruba themselves account for trance, and how, on the other hand, members of our own societies (American or Canadian, as the case may be) account for trance states occurring within our own social environment.

Generally, explanations of trance may be divided into two types. We shall call them, for lack of better terms, 'naturalistic' and 'supernaturalistic'. The former term has been chosen as the clearest opposite to the latter, and denotes explanations that take into account only natural processes and forces, and not supernatural and spiritual ones. 'Supernaturalistic' explanations of trance, as the name implies, draw on spiritual or supernatural processes, entities, or forces to account for the phenomena observed.

While we find naturalistic explanations of trance widely used in the Western world, they are not the only explanations used there. Indeed, the sub-cultural differences in modern mass societies make it particularly difficult to discuss trance behavior and spirit-possession beliefs in relation to these societies. On the other hand, we must also admit that 'naturalistic' explanations are not the exclusive property of modern Western society. Thus, for example, the Samburu, a pastoral tribal people of East Africa related to the Masai, believe that trance states, which occur with some frequency among their young men, are due to the pecuriarities of their status and the tensions associated with it. No supernaturalistic explanations of these states are offered (Spencer, 1965).

Naturalistic Explanations: Positive and Negative

Naturalistic explanations may be listed as either 'positive' or 'negative,' indicating whether they are considered desirable or undesirable, or, in some cases, can be listed as neither. In this naturalistic classification, we may interpret negative to mean pathological,' and positive and neutral to mean 'non-pathological'. We may note, in this connection, that in contemporary scientific literature the term 'trance' is found in

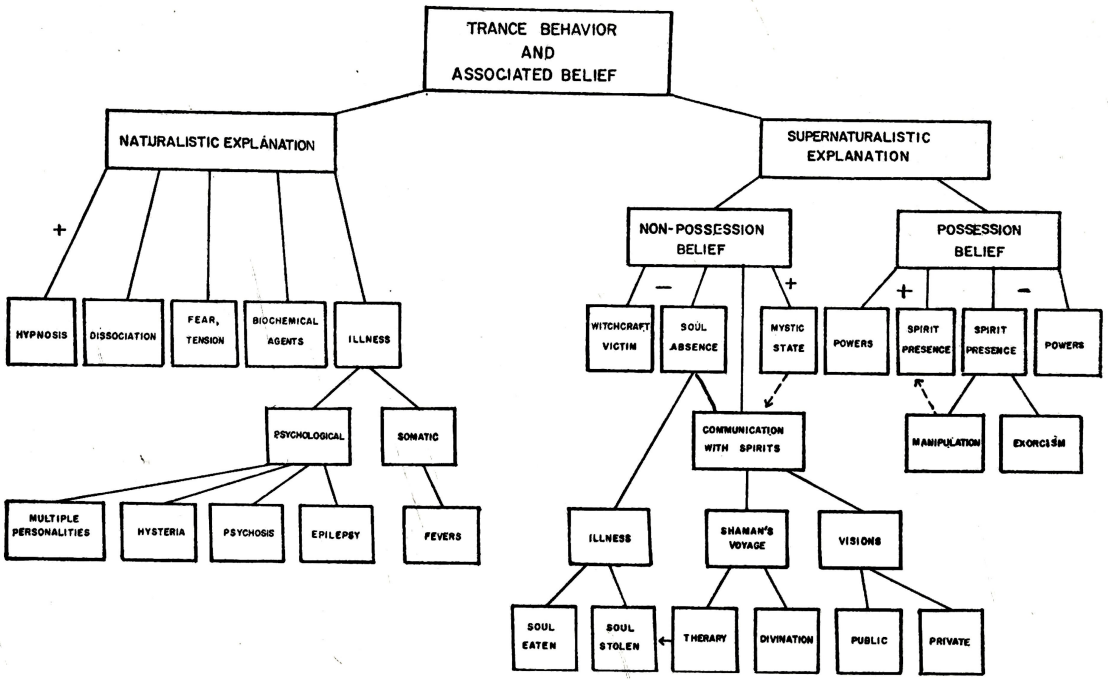


TABLE I

only one context outside of ethnography, and that is in the context of hypnosis. We may consider hypnotic trance phenomena as being non-pathological; also non-pathological are those types of dissociation which are not part of a disease situation. Whether the artist's and the poet's inspiration or the actor's impersonation (his identification with his role) are to be listed here is perhaps debatable, and we have not included them in our table. Some states of dissociation brought about by biochemical agents, such as drugs and alcohol, must undoubtedly be included here. The states produced by them (for example, those produced by the so-called psychedelic drugs) are eagerly sought by some as a positive good and, at least in some instances, without any supematuralistic explanations. On the other hand, the greatest likelihood exists that we will encounter more complex dissociational states in the context of illness, on the negative side of our diagram. Illness may be linked to the use of biochemical agents, as in the case of addiction. Then again, illness may be considered as involving disorders of a primarily psychological or psychiatric character (psychosis, hysteria, multiple personalities, epilepsy) or of a primarily somatic character, as in certain types of fever-producing illnesses.

While this discussion of naturalistic explanations of trance in Western society and elsewhere could be considerably elaborated, it is included here in its abbreviated form primarily for the sake of balance and completeness.

Supernaturalistic Explanations: Possession and Non-Possession Beliefs

Under the heading of super naturalistic explanation of trance behavior, we may distinguish between those explanations which involve concepts of possession and those which do not Several categories are to be examined among the latter. Perhaps the rarest or most atypical is that kind of trance thought to be due to being bewitched, or more generally, due to the power of witches and others (for example, the presumably hypnotic powers of the Pawnee medicine men) to cause persons to experience various types of alterations in their perceptual awareness of their bodies or their environment.

Of undoubtedly greater significance are the mystic states of Eastern and Western religious experience,[2] often associated with preliminary exercises of meditation, concentration, and certain rules of bodily manipulation (abstinence, fasting, breathing exercises, and the like). Some of these bear a relationship, *mutatis mutandis,* to methods used in attempts to communicate with spirits, as in the vision-quest of some American Indian tribes. Communication with spirits may occur in a private search or in a public seance, be it that of the Western spirit medium or of the Eskimo or Siberian shaman.

Non-Possession Beliefs: Soul-Absence

Various forms of absence of the soul, or of one of several souls, are also to be found among explanations for the existence of trance states. While permanent absence of the soul commonly serves as an explanation of death, temporary absence of the soul may serve to explain illness-producing trance states as situations in which the soul has been stolen by evil forces or spirits, or has been devoured by them. On the positive side, soul-absence may involve communication with spirits, in that the soul (or one soul) of the shaman may be thought to have gone or a voyage to the land of the spirits to divine the cause of the patient's illness or of other difficulties, or even to fight hostile spirits and bring back the soul of his patient and, thus, to effect a cure. In this instance, as in many others, the line between the positive and the negative sides of our diagram is difficult to draw, for the shaman's positive diagnostic and curative powers may have been acquired only as the result of a previous illness in which a temporary soul-loss was involved.

While the shamanistic trance, as well as the vision-quest trance in other cultural contexts, may sometimes be aided by the use of biochemical or physical agents, the factors inducing trance are not our concern in the present analysis. Rather, we wish to distinguish here the various explanatory systems used in the cultural contexts in which these states occur. While many South American Indian groups, for example, recognize

[2] See *Proceedings of the First Annual Conference,* R, M. Bucke Memorial Society for the Study of Religious Experience, Montreal.

the need to swallow great quantities of tobacco juice or tobacco smoke as a preliminary to their trance states (Dole, 1964), it is the reported contacts with supernatural beings during these trance states that are of primary interest to us here. The physiological factors associated with the trance state, its induction, and its termination, all require a separate analysis.

Soul-absence, either in the form of the shaman's voyage to the beyond or in the form of soul-loss illness, rivals possession as one of the major explanatory systems of trance. Like possession, as we shall see later, it has both a positive application (to the activity of the shaman) and a negative application (to illness). And like possession it applies not only to trance states but to other types of illness as well. Furthermore, it is also applied to shamanistic performances of the non-inspired type, so widespread among the Indians of North America, where there is no clear-cut evidence of trance states (Loeb, 1929). However, a discussion of the non-trance application of soul-absence would take us too far afield.[3]

As Luc de Heusch has pointed out (1962), belief in spirit-possession necessarily implies a belief in the temporary absence of a soul; for in order for possession to take place, particularly that type of possession involved in trance behavior, the displacement of a soul by the possessing spirit must occur. While this may be logically indisputable, nonetheless people with highly developed possession theories usually appear to pay little attention to this concomitant facet of their interpretation. A notable exception is found among the Yaruro Indians of Venezuela. According to Yaruro beliefs, the shaman journeys to the spirit land and urges the spirits to help his people, and the spirits in turn "arrive in the husk of the shaman, which he has left behind as a channel of communication for the other-wordly beings while his divisible self travels abroad" (Leeds, 1960). Among the Senoi and Samai of Malaya (Dentan, n.d.), the shaman may either send his soul away or be possessed; both interpretations of trance behavior and of communication with spirits during trance states are known to exist.

Generally speaking, however, in spite of these overlappings and occasional difficulties of interpretation, we may say that super-naturalistic interpretations of trance may or may not involve spirit-possession, and, among those which do not, theories of soul-absence are prominent. It should be noted, moreover, that both theories may occur in the same society, as alternative explanations of the same observations, as complementary explanations (as in the case of the Yaruro), or, more frequently, as applying to different social contexts.

Possession Beliefs: Spirit-Presence

We may now proceed to take a closer look at trance behavior interpreted as spirit-possession. This is charted at the right of Table I and to the left of Table II, which shows belief in spirit-possession. Here, we may again divide the experiences into positive

[3] See, however, various papers on soul-loss illness: for example, Gillin (1948) and Rubel (1964).

and negative ones, i.e., into desired and undesired states. This parallels Oesterreich's distinction (1922) between voluntary and non-voluntary possession. Another similar distinction is made by Murphy (1964) when she speaks of 'spirit-intrusion' as a cause of illness, but limits the term 'spirit-possession' to its positive application, as in the case of shamanistic seizures. In both instances, possession may be either by spirits or by non-personalized powers. The spirits may be those of greater or of lesser gods, of dead or of living human beings, or even of animals; the dead may be ancestors, fellow tribesmen, or strangers; and so may the living. (The variety here is very great, but much of the information needed for systematic classification of this material is unavailable in the literature on the subject.) It is striking, however, that where there is a belie in a High God, belief in possession by such a God is rare. In Christian tradition, there exists a belief in possession by the Holy Ghost, but not, with some dubious exceptions, by the other persons of the Trinity. There is no correlation apparent to us, as yet, between the type of possessing spirit and positively or negatively evaluated possession; nor with other differences to be discussed in the following paragraphs.

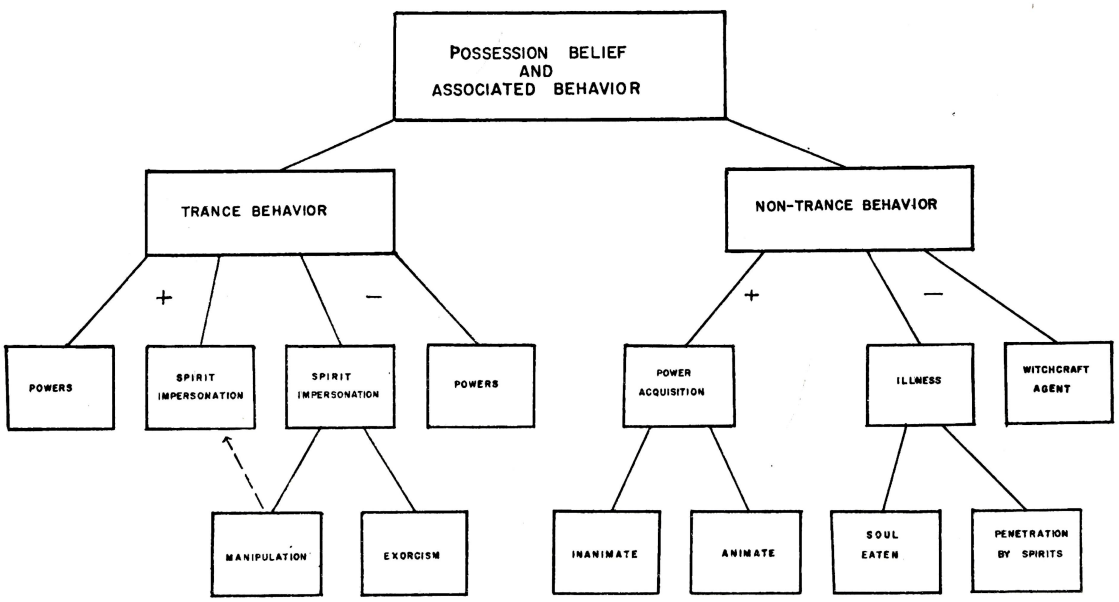


TABLE II

While we may contrast positive types of possession trance with undesired types, we may also compare these states along other lines. When we are dealing with a belief in possession by spirits rather than powers, we find that the trancer acts out an impersonation of the spirit. The behavior will, therefore, vary in conformity with the concept of the spirit which is to be impersonated. It may vary from the chaotic behavior of participants in the Kentucky revival to the formal and orderly behavior of

the Balinese child trance dancers. It may be stereotyped, as in Bali, or individuated, as in the case of the Haitian voodoo pantheon; it may be traditional and prescribed drama, as in Bali, or *commedia dell'arte* improvisation, as in Haiti. In both of these instances we find dramatic performances, whereas in the behavior of the shaman among the Nuba we find only a verbal impersonation. The range of possibilities is very broad here and the comparisons and contrasts which have been drawn in the literature have been predicated on whichever of the two, the similarities or the contrasts, has been focused upon. (Each of these cultural instances, I venture to say, is unique in its combinations of elements, some of which, in any given case, are comparable to elements in one society while others are comparable to elements in caite another society. Thus, even in the Afro-American cults, significant differences between one cultural or sub-cultural variety and another exist, and are to be understood in terms of a particular history and a particular sociocultural context.)

In possession trance, we find a very clear expression of the influence of learning and expectation on the behavior of the trancer. From a cultural and psychological point of view, it is important to stress that there is great variation in the amount of leeway which is permitted for the direct or symbolic expression of personal motivations and psychological themes. The more ritualistic, stereotypic, and formalized the proceedings, and the more the trancer must follow a dramatic 'script,' the less room will there be for a satisfaction of idiosyncratic needs.

Where spirit-possession is seen as undesired, either the spirits may be exorcised, expelled, and dispatched, or they may be manipulated and, within certain limits, transformed into helpful spirits. In this case, only the initial possession is negative; indeed, later ones, having been brought under control, may be positively evaluated. Shamanism, with its frequently associated initial state of illness, may involve either this type of situation in the context of possession trance, or, as we have seen earlier, trance without possession in the context of the shamanistic voyage or other types of communication between shaman and spirits.

Possession trance may also involve a belief in powers or forces (rather than in individuated spirits) which take over the person of the trancer. On the positive side, this is seen in the case of the Navaho hand-trembler, or curer, whose power resides in his arm and provides a diagnosis in response to his questioning (Kaplan and Johnson, 1964). Localized trance, however, may also be found in connection with spirits, rather than powers, as in Bali.

Influence of the Explanatory System on Trance Behavior

It is clear that whatever the physiological sources and constants of trance behavior, the explanatory system to which it is linked will necessarily influence the behavior

exhibited. In some of its facets, therefore, trance behavior explained as possession may be expected to differ significantly from trance behavior not so interpreted, although these categories are not so truly distinct nor even so contradictory as might appear to be the case on purely / logical grounds. We may consider that where spirit voices speak through the shaman in trance we are dealing with possession trance, and that where he, in trance, is heard to converse with spirits, we are dealing with non-possession trance. Yet the spirit voices, however altered, are still produced by him, and the distinction may not be an entirely meaningful one to the people involved. Furthermore, we also find cases of shamans or conjurors who are reported to be conversing with spirit voices, but who are also reported as not being in trance nor in ecstatic states. Indeed much has been said on the ventriloquist abilities of North American shamans or conjurors. We have already referred to Loeb's famous distinction between shaman and seer (op. cit.), which Hallowell (1942) has quoted and applied to the Saulteaux conjurors. The data on North American conjurors are primarily historical and the psychological materials are sparse. Generally, we must consider most of these materials outside the context of trance simply because the data required for their inclusion are absent. And yet Hallowell's material raises some tantalizing questions; as, for example, when he tells us that the Saulteaux conjurors were probably generally of good faith, and that some claimed to have seen the spirits in the conjuring lodge. The problem is not very different from that presented by Boas (1930), and analyzed by Lévi-Strauss (1958), for the Kwakiutl. However, we are, I believe, on safe ground in asserting that, whatever the situation of the conjuror from the point of view of his culture, it is not likely that he experienced a truly altered state of consciousness, and furthermore that there was no discontinuity of personality functions, of sensory modalities, of memory, or even of behavior patterns, all of which we must necessarily consider criteria of dissociation. While much has been written on the question of extra-sensory perception among conjurors, there simply are no adequate data available on which to base a discussion.

Possession Belief and Non-Trance Behavior

Possession, as indicated earlier, need not be expressed through trance behavior. Here again, we may bifurcate our materials into positive (desired) possessions and negative (undesired) possessions. In the negative variety, possession is due to a personalized, animate being. We again find that such possession may cause illness or may transform a person into an agent of a witchcraft being. Such a being may cause illness in others and its physical presence in its agent will be found upon the agent's death and the performance of an autopsy on his body. This is a notion which appears to be limited to Africa, as far as our present data show, but which is rather widespread on that continent. Illness blamed on possession may be thought of as being due to the entry of illness spirits into the body. More specifically, such spirits cause illness by attempting to eat the soul or one of the souls of the victim and, indeed, cause death if they succeed

in doing so. The positive type of possession, on the other hand, involves the presence of a power, either inanimate or that of a previously living spirit. Such possessions are permanent and confer power, and although they are not expressed through trance states, the first acquisition of the power may indeed be expressed through a brief state of dissociation, as in the installation ceremonies of the Nyikang, the king of the Shilluk (Lienhardt, 1954). Here, the soul of the first king enters the body of the new king during his installation and this occurrence is observed as a brief seizure. The possession itself, however, is permanent. Among the Jivaro, on the other hand, the souls acquired through headhunting confer power through possession. There is, however, neither trance, seizure, nor personality alteration (Harner, 1962). On the other hand, the possessing power may be inanimate, like that which resides in the Navaho or Havasupai medicine man, and which makes his cures possible.

Notable Features of the Scheme of Explanatory Systems

Our scheme makes no claim to finality of any kind. It is to be considered merely as a heuristic device, which has, it seems to me, permitted us to bring some order into a bewilderingly vast and diverse mass of materials. In developing this scheme, we are considering the materials from the perspective of culturally divers tied systems of cognition and explanation. For an ordering of other data (for example, the factors involved in trance induction) one would require a totally different scheme, built on such supra-cultural categories as those of biochemistry, physiology, pharmacology, etc. (On the other hand, it is tempting to suggest at least one hypothesis that links the two systems: it is my impression that possession trance is much less likely to involve biochemical and physical agents for trance induction than do trance states associated with other explanatory systems.)

As we examine the categories of explanation included in Tables I and II, we note the recurrence of several features. The most striking of these is the recurrence of both negative and positive evaluations of trance, both in the naturalistic and the several supernaturalistic explanations of trance, and in the application of possession concepts to non-trance behavioral states as well. This contrast is so striking that, as we have pointed out earlier, Oesterreich (op. cit.), who did not distinguish between trance and possession, used it as the basic organizing concept of his pioneering work by speaking of voluntary (positive) and involuntary (negative) types of possession.

The observation that a limited set of common explanatory categories serves for both positively and negatively evaluated experiences deserves special mention. The significance of this fact is further highlighted by the observation that negative experiences may be transformed into positive ones. Illness involving types of trance (for example, loss of consciousness, fugue states, visions, etc.) and variously interpreted as soul-loss,

as possession, or as a supernatural call, often precedes the acquisition of supernatural powers. We may cite, choosing our examples almost at random, the Balinese of Indonesia (Belo, 1960), the Dards of Pakistan (Snoy, 1960), and the Akan-Ashanti shrine cults of Ghana (Field, 1960), in addition to well-known examples from Siberian shamanism (Bogoras, 1907). A less drastic transformation occurs in the various possession cults of East Africa, in particular in the zar cult of the Amhara and their neighbors. Here, possession is seen as the cause of illness, and possession-trance is induced in order to question the spirit as to its demands. However, the spirit is not exorcised or dispatched. Rather, attempts are made to meet its demands and a *modus vivendi* is worked out between the patient and the spirit, which involves, apparently, a degree of manipulation of the patient's social environment. And while the patient, generally, does not become a shaman, a therapeutic result is achieved. Moreover, future instances of possession-trance are evaluated positively, rather than negatively, and possession thereafter is voluntary rather than involuntary (Leiris, 1958; Messing, 1958).

Combinations of trance experience with several types of explanation, and combinations of possession theories with various types of behavioral manifestations, may co-exist in the same society.

An example is provided by the For of Dahomey. Here soul-loss trance, in the form of 'tempora ry death,' precedes possession trance (Verger, 1957). In Azande society we have another constellation, this time involving divination. In this case, divination through possession trance is found only among women, and trance divination without possession only among men (Evans-Pritchard, 1937, 1962). Here, two forms of trance coexist in the same society, but in varying socio-cultural contexts within it.

Typological Division of Trance and Possession States

If we now wish to examine the worldwide distribution of the phenomena under disci ssion, we shall not be able to do justice to the various detailed aspects considered so far. Rather, we shall have to limit ourselves to a somewhat cruder analysis. In the following, then, we shall distinguish only between possession-trance (PT), trance linked to other explanatory theories (T), and possession linked to other behaviors (P). Theoretically, presence or absence of any or all of these three variables gives us eight possible types, as shown in Table III. And indeed, we do find various instances of each of these eight theoretically possible types represented in our ethnographic sample. Some random examples are indicated in Table III.

TABLE III

Type	**T**	**P**	**PT**	**Ethnographic Examples**
1	—	—	—	Pygmies, Tiv
2	x	—	—	Bushmen, Amahuaca
3	—	x	—	Nyakyusa, Aymara
4	—	—	x	Trinidadians
5	x	x	—	Ayoreo, Riffians
6	x	—	x	Yoruba, Azande
7	—	x	x	Haitians, Ndembu, Shilluk
8	x	x	x	Fiji

– absent x present

Two preliminary words of caution are called for, however, before we proceed to a discussion of our distributional maps. These refer (1) to the problem of the absence of a cultural trait, and (2) to the heterogeneity of the types represented in Table HI.

1) *Absence of a cultural trait.* This is the great handicap in all distribution studies. It is as important to identify the societies and regions in which a given trait or trait-complex (here PT, T, or P) is absent as it is to identify those in which it is present, and this fact is implied in our typology. Furthermore, any correlational studies would need to contrast groups in which a trait or trait-complex is absent with those in which it is present. And yet, specific concrete information on absence of trance practices or possession beliefs is virtually non-existent in ethnographic literature. And since we now know that the presence of PT does not necessarily imply the absence of T, nor the presence of T the absence of P, our discussions of presence or absence depend mostly on inference and circumstantial evidence, tend to be equivalent to 'not reported,' and stand to be corrected.

2) *Heterogeneity of types.* As must be evident from our discussion of the variety of subdivisions which we have found for our categories PT, T, and P, combinations of these are not likely to yield homogeneous types. Thus, for example, our Type 2 is represented by the African Bushmen of the Kalahari Desert (Marshall, 1962) and the Amahuaca Indians of the interior Amazon region (Carneiro, 1964). In both instances, trance involves communication with spirits and no concept of possession is reported; and also in both instances, it is the men who go into trance. However, the Bushman trance appears to be induced by dance and by psychological factors; it is a collective phenemenon, primarily concerned with curing. On the other hand, neither curing nor dancing are relevant in the case of the Amahuaca. Other differences, differences of a

geographic, ecological, economic, social, and cultural nature, also exist between these two groups. To cite another example: Type 3 is represented by the Aymara of Bolivia and by the Nyakyusa, a Northeast Bantu people of East Africa. Both of these groups have a belief in possession which is not related to trance behavior. The Aymara believe that possession causes illness (LaBarre, 1948). On the other hand, the Nyakyusa believe that only certain men are possessed and that such possession turns them into witches. Witchcraft is thought of, in concrete terms, as the presence of a python in the abdomen of the possessed person (Wilson, 1951). For neither society do we have reports of possession-trance (PT) or trance without possession (T). Again, these two groups differ greatly with respects to general economic, geographic, social, and cultural factors.

I do not wish to labor the point. Our distribution maps contain a great deal of information, but are modest in intent. A map showing the distribution of possession beliefs in Africa, beliefs which are not associated with trance, tells us nothing about the great variety of specific beliefs involved. More refined studies concerning, for example, possession as an explanation of illness still remain to be made. Yet we feel that, by separating PT, T, and P, we have taken a step beyond the broad and undefined categories of either 'trance' or 'possession' as they occur in ethnographic literature.

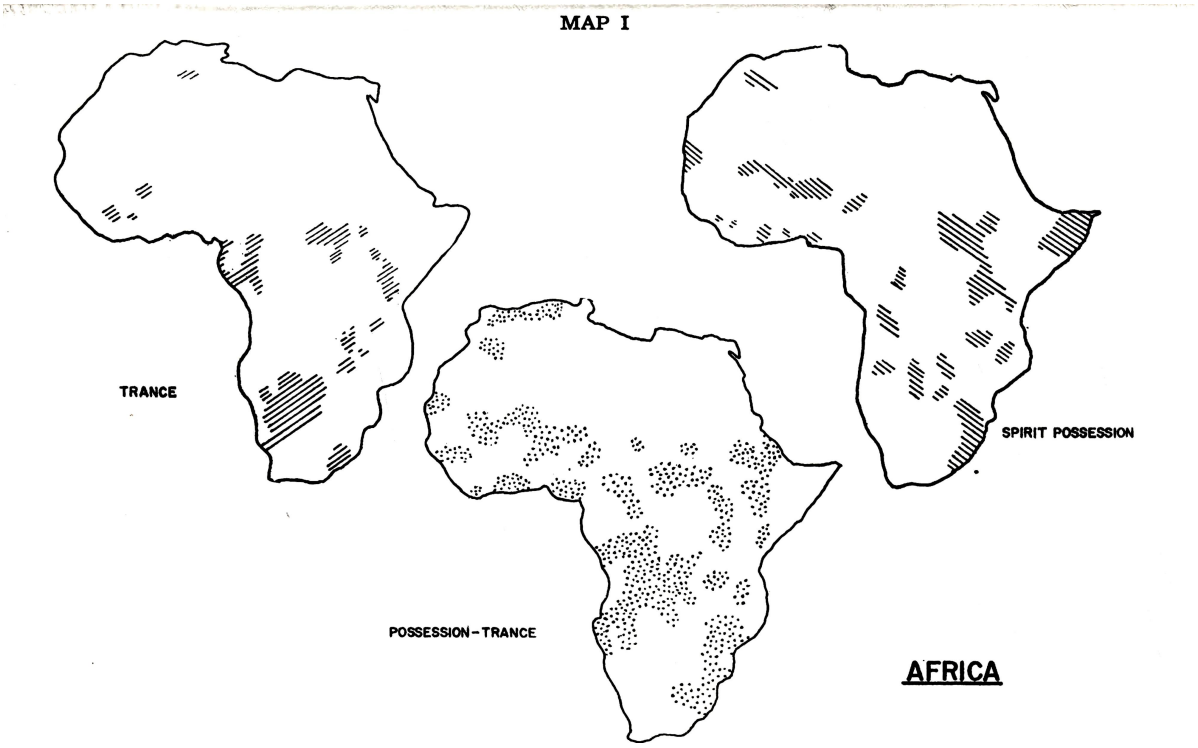
As to our eightfold typology, its usefulness has yet to be tested, beyond its application to the plotting of distribution maps. While the types appear to group together some dissimilar phenomena, as our discussion has just attempted to show, we must recognize that our predicament is not peculiar to this particular enterprise. Socio-cultural systems, like individual personalities, are unique, complex wholes, and it is only by abstracting certain common features and ignoring other features that we can ever hope to find any order in our mass of data. The problem is to find the features which, are truly diagnostic with reference to the questions at hand.

Distribution of Trance and Possession States

Africa

With these preliminaries in mind, we may now take a look at the first of our maps.[4] We have found it necessary to utilize a method of sampling that is heavily influenced by the availability of data. However, we have attempted to balance our sample by including materials from all the culture areas of the world, following in this respect Murdock's 'World Ethnographic Sample'. We start with Africa because, for a number of reasons, we have made several special studies of African materials. We present three maps, one each for possession, trance, and possession-trance. Possession-trance exists

[4] The maps were drawn by Mrs. Mildred Hyman Williams. The data are derived from the archives of our Cross-cultural Study of Dissociational States assembled during the past three years. The coding was done by Mrs. Jeannette Henney and Mrs. Judith Gussler, both of whom also contributed greatly to the collection of the materials.



MAP I

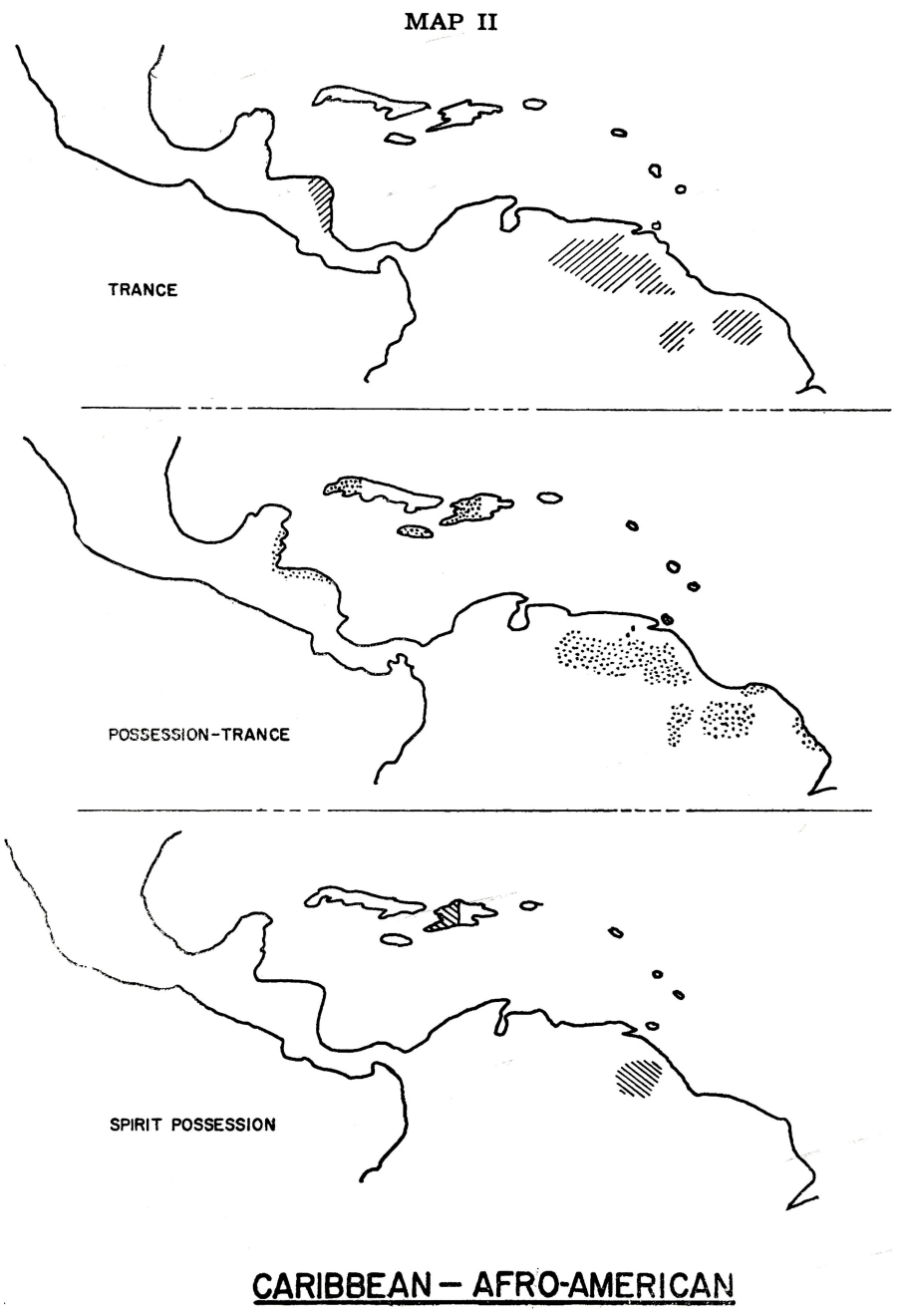
in all culture areas of sub-Saharan Africa, with the exception of the Pygmy and the Bushman-Hottentot areas. Trance is found primarily among the Bushman-Hottentot groups and in the Upper Nile area. It is also found among some groups of the Guinea Coast, particularly in Liberia, and among the Fang and Kpe of the equatorial Bantu. Absence of trance, as well as of possession trance, appears among the Pygmies, as well as in the Nigerial Plateau area, in the Upper Nile, and in neighboring areas of Ethiopia, where there is, however, some evidence of a progressive advance of the possession-trance complex among the Galla. A comparison of the maps reveals a considerable degree of overlap between the distribution of the three groups of traits. This is particularly striking in southeastern Africa, among the Southern Bantu, where possession-trance, possession-illness, and trance coexist in a number of groups.

While the African picture as a whole is highly varied, there is one configuration which recurs again and again and which therefore deserves special mention. This is the cult group in which possession-trance is encouraged and in which women predominate, if not as members, then certainly as trancers. This is exemplified in the complex and elaborate cult groups of the Guinea Coast, in the intertribal societies of East and Central Africa, such as the Cwesi cult, and in the zar cult of Ethiopia and adjoining areas. A great many other examples could be cited, and while there are some important variations, here, the striking common features involve cult organizations, possession-trance, and a predominance of women in the possession-trance activities.

Afro-America

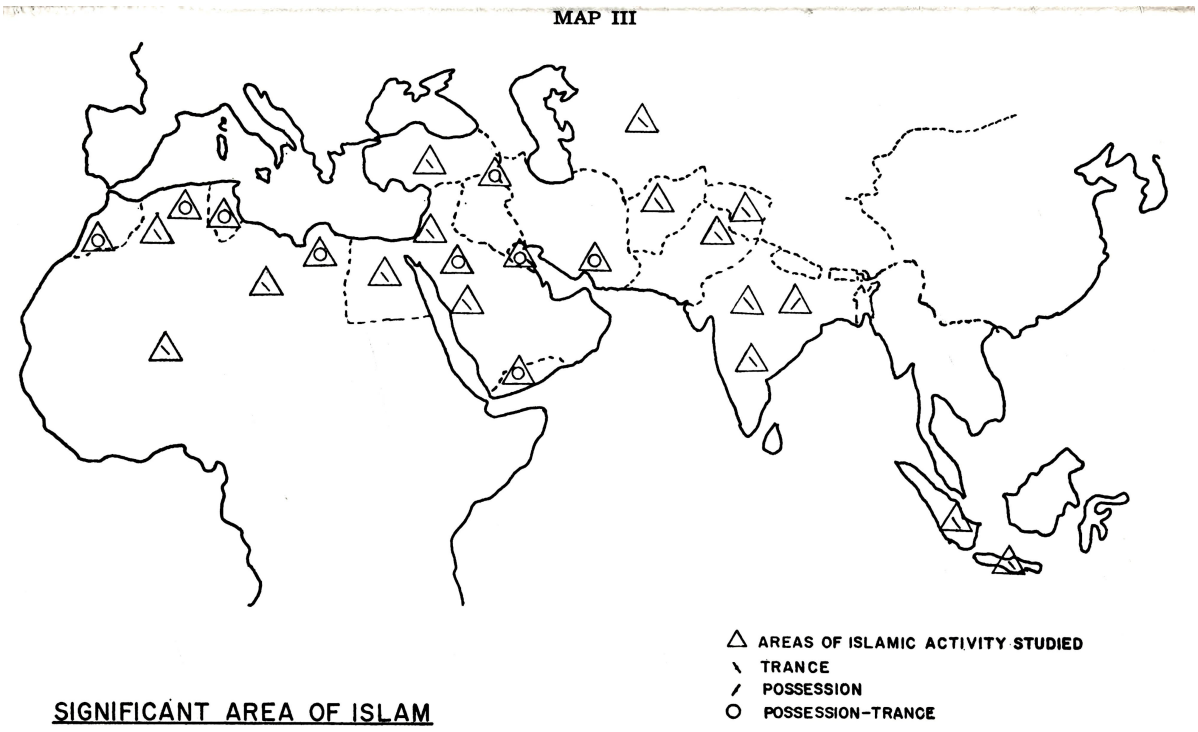
The slave trade, which lasted well into the nineteenth century, distributed the pattern described above into that portion of the New World which is referred to as Afro-America (Map II) and

into the Islamic areas adjoining Negro Africa. In Afro-America, cult groups of varying complexity have been reported in the Caribbean area and coastal Brazil. It is likely that New Orleans once represented an outpost of such cults in the United States. The Afro-American cults are heavily overlaid with Christian syncretism and there is a good deal of regional variety. It is striking, however, that while such cult groups have been described for Cuba, Jamaica, Haiti, Trinidad, the Guianas, and coastal Brazil, there appears to be a notable absence of such groups in the Dominican Republic, in Puerto Rico, and in the smaller islands from the Bahamas through the Virgin Islands to the Lesser Antilles. The reasons for this unsual absence will have to be sought in historical and socio-cultural factors. In Cuba, in Puerto Rico, and probably elsewhere, there is an important element of spiritualism which involves possession-trance séances (but no dancing or active group participation) and which is largely devoted to therapeutic tasks. The role of evangelistic Protestantism, with possessions by the Holy Ghost, is beginning to be investigated more closely throughout this area. In the United States this represents one institutional area, for bo th Negroes and whites, where possession-trances find expression.


MAP II
TRANCE
POSSESSION-TRANCE
SPIRIT POSSESSION
CARIBBEAN – AFRO-AMERICAN

MAP II

Islamic Area



MAP III

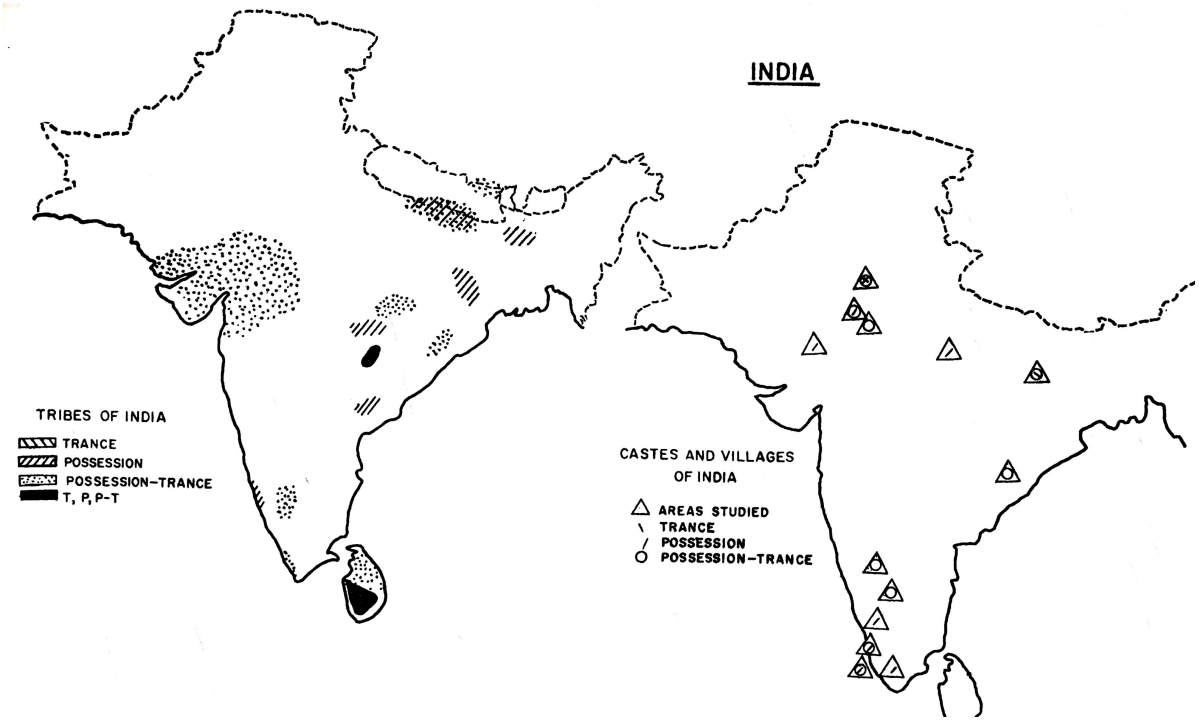
The other area into which Negro-African religions have expanded is that of Islam. Both the zar cult and the Negro Islamic brotherhoods of North Africa (in which women frequently play an important role) show an extension of the cult group, possession-trance pattern to the north and east of the Negro-African area (Paques, 1965).

Islam, like the other world religions, presents us with a difficult problem. Its broad area of diffusion reaches from Northwest Africa to Indonesia. It has placed the stamp of a 'Great Tradition,' in Redfield's terminology (1956), on a great many peoples of diverse history and culture. On the village level, we still find an expression of the local Little Traditions, though often tightly wed to elements from the general Islamic Great Tradition. Map III indicates our sampling in a major segment of this vast area.

Among the generally shared patterns to be observed among Islamic peoples, we find the presence of Moslem brotherhoods with their exercises of meditation and breathing, notably expressed in the *zikr,* which is practised in Indonesia and in Morocco. Trance states are at times sought and achieved in these exercises (Landolt, 1965). Self-torture, such as flagellation, occurs in the context of pilgrimages (Chelod, 1963) and this, too, rnay lead to ecstatic states. Such practices, as well as breathing exercises or meditational exercises, are characteristically absent in Negro Africa. We also find

a very widespread belief in diseases caused by possession by a jinn or sheitan, and these require exorcism. Such beliefs and practices connected with illness recur among people as distant from each other as the Tuareg and the Kurds, as well as among the Bedouins of the Negev, but need not be connected to any type of trance behavior. In the exorcism which these beliefs call for (again in contrast to Negro Africa), whipping of the patient may be resorted to (Chelod, 1965). On the other hand possession by certain souls of the dead, which permit the trancer to establish communication between his clients and the departed, seems to be a rarer phenomenon, notably reported from Egypt (Winkler, 1936). The zar cult, as already mentioned, has established itself not only among Negroes but also among Egyptian women of various classes, and was made to accept syncretic Moslem elements (Salima, 1902). It is also found in Arabia, in Kuwait, and in Southern Iran, as well as in Ethiopia and in Somaliland.

India



MAP IV

We may move on to look at the distribution map of the Indian subcontinent (Map IV). Here the symbols on a single map distinguish the presence and the co-existence of the patterns under consideration. In this area, in addition to the presence of Islam (in India as well as in Pakistan), we find the Hindu Great Tradition, not to mention

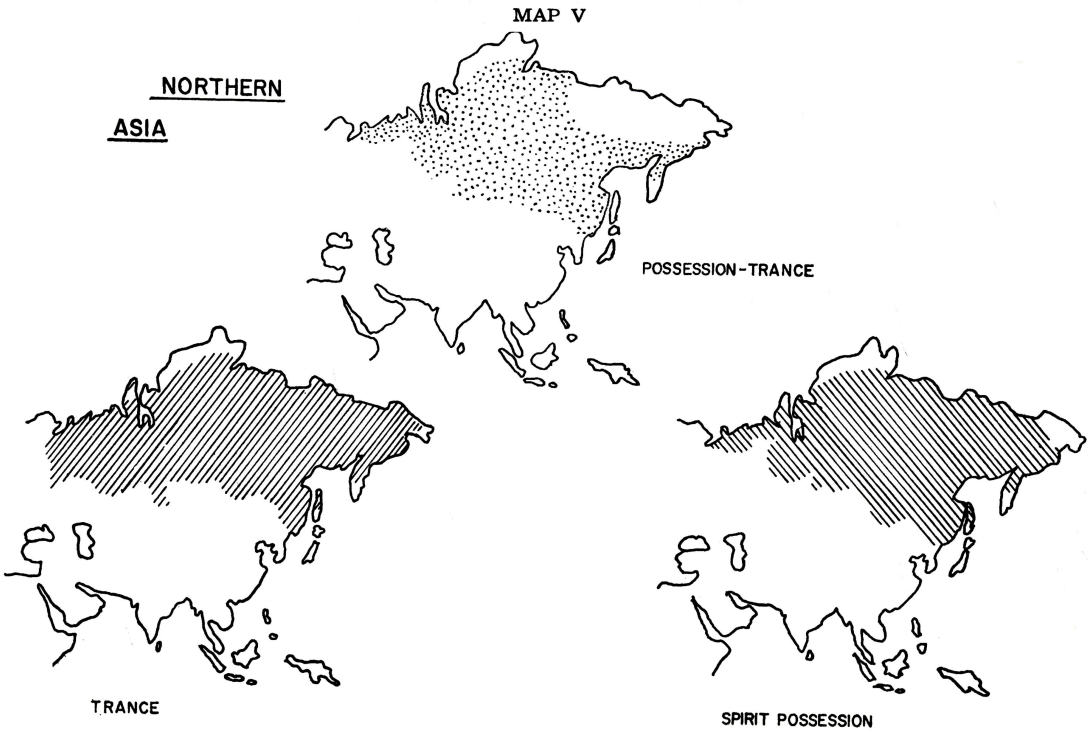
various local traditions, on the village level as well as among other tribal peoples. The data are sometimes reported in terms of a particular village or in terms of a particular region, and sometimes in terms of a particular caste or sub-caste, which may have a sizable regional extension. We have attempted to express all information on villages, caste groups, and tribal groups in purely geographic terms for the purposes of this quick survey.

Trance and possession-trance related primarily to meditation and to the festivals of the great Hindu gods occur in the context of the Hindu tradition. On the village level we find possession illness and possession-trance illness, as reported by the Freeds (1962, 1964) and by Opler (1958), among others. The victims frequently appear to be young women. Possession-trance also occurs in a positive form, in a diagnostic and therapeutic context, in the person of the healer or diagnostician. In Bengal and Madras, possession-trance appears to center around the worship of Kali, and this practice has been strongly established in the New World in British Guiana by Indian migrants (Rauf, n.d.). Similarly, possession illness has been reported among Indians in Trinidad (Klass, 1961), where some syncretism with African-derived patterns « appears to have taken place.

While trance patterns and possession beliefs have not been reported for some of the tribal peoples of India, for example the Chenchu (von Fiirer-Haimendorf, 1943), they have been reported for many others, as the map shows. We may once again refer to the contrasts with Africa: possessing, illness-causing spirits may be questioned in trance and their demands may be met, as in the zar cult; but unlike the latter, the aim here is the expulsion of the troubling spirit. Sometimes, beatings and fumigations may be resorted to in an effort to drive out the spirit and these, as newspaper reports occasionally show, may have disastrous consequences for the patient. There are no cult groups and there is no accommodation with the spirits. The mediumistic aspects of possessiontrance are prominent in India, among tribal peoples as well as among villagers (cf. description of Bhil shamans in Hermanns, 1964).

Northern Asia

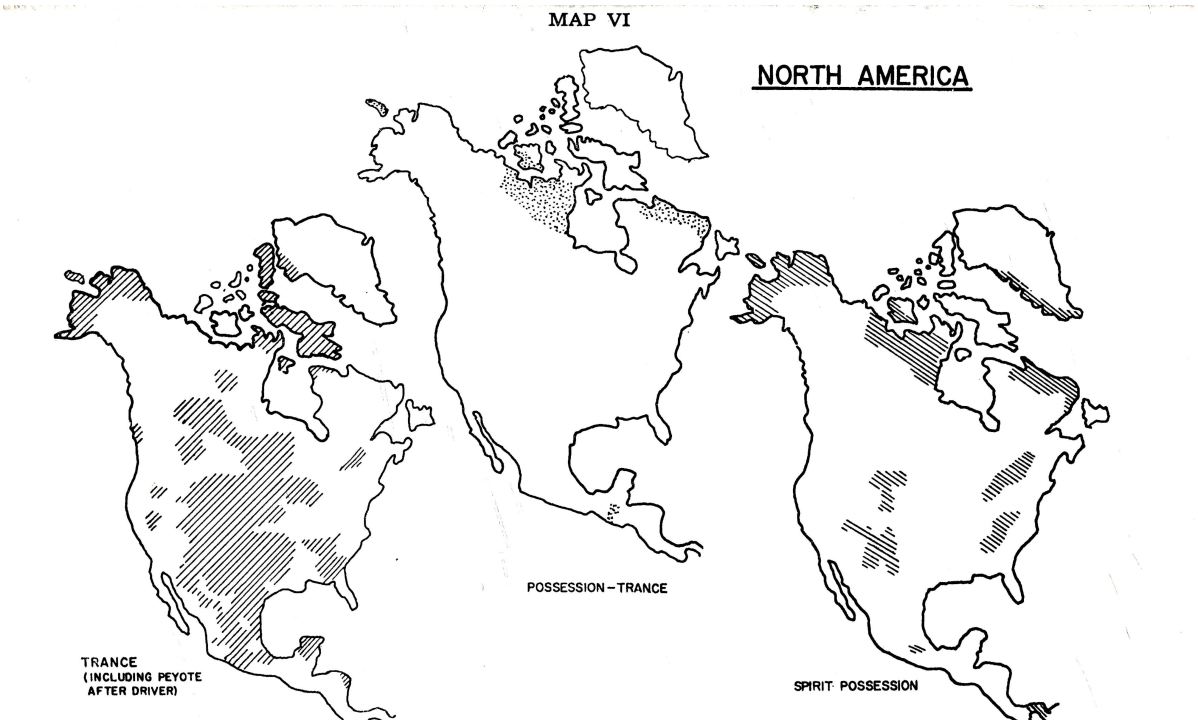
Mediumistic patterns are widespread in other portions of Asia as well (Map V). Once again, we have three maps which present PT, T, and P separately. It is interesting to speculate to what extern the mediumistic processes in this area derive from tie great shamanistic tradition of the circumpolar regions. This has been shown clearly by Shirokogoroff (1935) for the Manchus. The Chinese varieties of mediumism were brought by Chinese migrants to Singapore, to Hong Kong, and to Hawaii, where they have been documented. Chinese influence also appears in the mediumistic traditions of Southeast Asia, Korea, and Japan, although it appears likely that in all these regions indigenous patterns were overlaid with Chinese syncretic influence. In addition to mediumistic possession-trances, we find references to possession by fox spirits in China and Japan, and these involve a context of deviancy and/or illness (Yap, 1960). The


MAP V
NORTHERN
ASIA
POSSESSION-TRANCE
TRANCE
SPIRIT POSSESSION

MAP V

circumpolar region, which includes the Eurasian and American Arctic, is, of course, the classical area of shamanism, where we find both soul-loss illness and possession illness, as well as shamanistic trances which involve either possession of the shaman by various spirits or the absence of one of the shaman's souls, which travels in search of information or to retrieve the lost or stolen soul of the parient. Sometimes, however, it is not the shaman's soul which makes the trip, but rather one or more of the shaman's familiar spirits. The shaman's performance may be very elaborate and theatrical, the prime content being a report of his trip, a conversation with the various spirits, or communication by the spirits. There are striking similarities here with shamanism among, for example, the Senoi-Semai of Malaya and some South American groups. Depending on the tribe, shamans may be male or female, and some transvestites have been reported. Asiatic shamanism reaches into Europe in Hungary, in Finland, and in Lapland. Interestingly, it has been reported that Lapp Protestantism has a peculiar character, with ecstatic states that are unknown to the neighboring Swedes (Pearson, 1949).

North America



MAP VI

In our quick survey we now rush on to North America (Map VI). Here we may distinguish between, on the one hand, the Eskimo, whose shamanistic patterns clearly

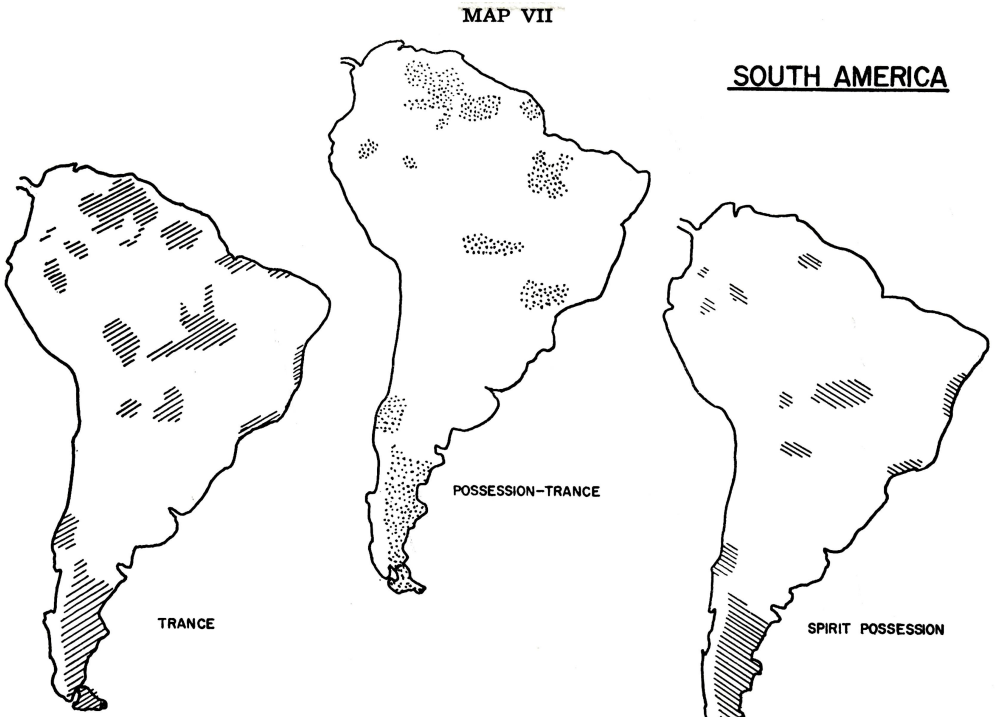
relate them to the remainder of the circumpolar region, and, on the other hand, North American Indians. While there is a great and voluminous ethnographic literature on North American Indians, the materials relating to trance and possession are particularly difficult to interpret. While it was long believed that possession illness was absent in North America (e.g., Koeber, 1962), Teicher (1960) has demonstrated that this is not quite so, by showing that some reports of windigo psychosis among the Indians of northeastern Canada do refer to possession *by* a windigo spirit, rather than to the patient's turning *into* a windigo spirit. Illness has sometimes been explained as possession by a power, as in the previously mentioned case of the Navaho (op. cit., Kaplan and Johnson). However, it is true that soul-loss and object-intrusion were much more widespread as explanations of illness in North America and in South America as well. There are many references in the literature on North American Indians to visions and to the vision-quest, and while the distinction is not always made between visions and dreams, it is clear that in a good many instances we are dealing with visions occuring in trance states, states brought on by fasting, isolation, self-mutilation, etc. The use of biochemical inducers of trance and vision states is now widespread in the Peyote cult, but this has its pre-Columbian precursors both in the southwestern United States and in Mexico. Trance states were clearly part of the shamanistic patterns of some Indian groups, such as the Yorok of California, and possession-trance appears to be clear-cut among the Kwakiutl of the Northwest Coast.

However, the whole matte of possession-trance has given us so much difficulty with reference to North America, that we have preferred to omit it from the present mapping. (A very peculiar instance is found among the Acoma Indians of the Southwest, where, Leslie White implies (1932), the masked dancers are believed to be possessed by the visiting katchina spirits, although there is no indication that they are in trance.) Much North American shamanism, we must repeat, appears to have been of the non-inspirational type, and although shamans communicated with spirits, sent their spirit-helpers on trips, and performed various sleight-of-hand tricks reminiscent of the activities of the arctic shaman, there are few references here to true trance or to any belief in possession.

South America

Among South American shamans, on the other hand, trance activities were, and to some extent are, widespread, as our next group of maps shows (Map VII). Various drugs and tobacco were used to induce these states, some of which may have involved prolonged unconsciousness (op. cit., Dole). Possession beliefs, whether or not associated with trance, appear to have been relatively rare. One group for whom they have been reported are the Aymara, and LaBarre (1948) links a belief in possession

illness among these people to trepanations practised among them in pre-Columbian times. However, there is no reference here to possession-trance. Indian shamanistic practices have been syncretized with Afro-American cult practices in the Amazon area



MAP VII

of Brazil (Leacock, 1964) and among the Black Caribs of British Honduras (Taylor, 1951).

Judeo-Christian Tradition

While this very rapid survey of the worldwide distribution of possession and trance states makes no claim to completeness, we must make one more brief reference, and that is to the Judeo-Christian tradition. We have made no attempt at mapping the area involved, bi t we have already had occasion to refer to this tradition several times in the context of syncretism. The New Testament makes ample reference to possession illness and exorcism, and ideas of demoniac possession have been accumulating ever since the time of Christ, in Judaism, in Catholicism, and in Protestantism. The French psychiatrists of the nineteenth century were very much interested in these phenomena, particularly in connection with their studies of hysteria. These beliefs are still very influential, not only in *a* religious context, but even as a theme in films, in novels, and in other areas of popular culture. Apart from possession states, mystic trance states have a long and complex history in the Western world. The concept of mystic states has recently been somewhat secularized in the term 'peak experiences' (Maslow, 1964), as well as in the pursuit of psychedelic experiences through drugs. Eastern techniques of meditation have made inroads in Europe and America, as for example in the Subud

sect, which originated in Indonesia (Kiev and Francis, 1964, for England; Pfeiffer, 965, for Germany).

While we have centered our attention here on traditional, so-called primitive societies, the problems of trance in its naturalistic and supernaturalistic interpretations are clearly of considerable relevance even in the modern world.

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The Sociology of !Kung Bushman Trance Performances[1]

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Ethnographic Background

The !Kung Bushmen, a non-Bantu, click-speaking people in the Kalahari Desert of Bechuanaland, are one of the last peoples of the world to maintain a hunting and gathering way of life. As such, they offer an excellent opportunity for studying a way of life which was, until 10,000 years ago, the universal mode of human organization. Aspects of !Kung culture have been described by Lorna Marshall (1959, 1960, 1962), and by Elizabeth Marshall Thomas in her wed-known book, *The Harmless People* (1959).

My field work among the !Kung was carried out from August, 1963, to January, 1965. The focus of the study was an isolated population of 430 Bushmen living in the northwestern corner of the Bechuanaland Protectorate (Lee, 1965).

About 75 per cent of the population were organized into fifteen independent nomadic camps of from ten to sixty individuals each. These camps were entirely dependent on hunting and gathering for their subsistence. They lacked agriculture, firearms, and, except for the dog, domesticated animals. The remaining 25 per cent of the people lived in association with the Bantu cattle posts located in the area. Although this latter 25 per cent subsisted on foods provided by the Bantu, they shared fully in the ritual and religious life which I am going to describe.

The Bushmen of the study population had had minimal direct contact with Europeans prior to my arrival. Officers of the British Colonial Administration made infrequent tours of duty to this isolated area three of four times a year, and missionary influence was completely lacking. However, the Protectorate of Bechuanaland gained independence in September, 1966, and one can expect the tempo of acculturation to increase in the coming years.

[1] My thanks are due to the National Science Foundation for their initial and continuing support of the Bushman research project. Miss Jean Briggs and Dr. Richard Katz were kind enough to read and criticize an early draft of this paper.

Trance in Bushman Ritual Life

The trance phenomenon in the Bushman context is a culturally stereotyped set of behaviors which indices an altered state of consciousness by means of auto-suggestion, rhythmic dancing, intense concentration, and hyperventilation. These exertions produce symptoms of dizziness, spatial disorientation, hallucinations, and muscular spasms. The Bushmen were never observed to use any drug or other external chemical means of inducing these states. The social functions of these trances are to cure the sick, to influence the supernatural, and to provide mystical protection for all members of the group.

The features I want to stress include: (1) the high incidence of trance in the population; (2) the public and routine nature of trance performances; (3) the lack of awe surrounding the performer; (4) the long period of close social contact which characterizes the apprenticeship of a performer; and (5) the unusual native belief that their power comes from men, and not directly from the gods or spirits.

Trance performance is the dominant mode of religious expression among the !Kung. One striking fact is the unusually high proportion of active performers in the population; of the 131 adult males, at least sixty are practising trance performers. I was fortunate enough to see thirty-five of these in action and I learned about twenty-five more during census work. It is likely that I missed a few and therefore would safely estimate that 50 per cent of the male adult !Kung are trance performers.

The trance is not exclusively confined to men. In recent years a drum dance has developed among the women and is gaining

ncreasing adherents. One of the founders of the dance, a woman over eighty years old, was still alive in 1964. However, this paper concerns the Bushman 'curing dance'. This is the major setting for the trances and is an institution with the deepest roots in Bushman tradition. The curing dance has been recorded from all Bushman cultures and is known to have been practised by the now extinct Cape Bushmen in the eighteenth century (Scl apera, 1930: 202–7). There is no historical basis for suggesting that the !Kung version of the curing dance is a cult which arose as the result of outside acculturation pressure.

Spatial Arrangements in the Dance

The dancing circle has a tight symbolic organization. In the center is the fire, representing medicine. It must be kept burning throughout the all-night dances. Surrounding the fire and within the circumference of the circle, the women sit shoulder to shoulder facing inwards. Primari y, the women sing, and dance only occasionally. The men dance in the circular rut, stamping around and around, hour after hour, now clockwise and now counter-clockwise. Beyond these two tight circles of singers and dancers, sit the spec tators, the chi dren, and the dancers who are temporarily resting.

Division of Sex Roles in the Dance

There is a basic asymmetry of roles in the curing dance. Only the men dance and enter trances. Therefore, the emotional satisfaction derived from the trance experience is confined to the men. Yet the participation of the women is fundamental, for it is they who provide the musical framework which makes the trance experience possible. The men are quick to acknowledge this, and say that the success of the dance is dependent on the perseverance and sustained enthusiasm of the women.

Scheduling of Dances

Apart from a male initiation ceremony, called *choma,* which takes place during the winter every four or five years, the Bushmen have no ceremony which is tied to the annual cycle, such as the first-fruits rituals of the Australian aborigines. The Bushmen dance at all seasons of the year, winter and summer, with no discernable changes in frequency.

There are, however, marked differences between camps in the frequency of occurrence of dances. Small camps, of less than twenty people, held dances about once a month. Large camps, with forty to sixty people, danced about once a week. At one camp, a camp which had a reputation for fine music, dances occurred as often as four nights a week. There is some indication that the Bushmen prefer to dance at the time of the full moon, but I could discover no reason for this preference beyond the fact that the light is better.

A dance is a major all-night affair that involves the majority of the adult members of the camp. It is worth noting that the dance is a social and recreational event as well as a context for trance performances. Many of the younger men dance for no reason other than to show off their fine footwork. There is a juxtaposition of the sacred and the profane in the dance, with the intense involvement of the trance performers contrasting with the background of casual social chatter, laughter, and flirtation.

A dance will spring up spontaneously if the informal organizers can talk up enthusiasm for it. Three kinds of circumstances favor its initiation:

1) *The presence of meat in a camp.* The Bushmen are conscientious though not particularly success J hunters. Often days go by when their diet consists solely of wild vegetable foods. When a large antelope is killed and its meat is shared out among the camp members, a dance is likely to occur. I might add that there was no explicit suggestion of giving thanks to the deity or of ensuring success in future hunts. The main rationale seemed to be: since there is abundant food in the camp today, we can afford to dance all night without being concerned about the necessity of going out for food tomorrow.

2) *The arrival of visitors.* The joy of seeing old friends from other camps and the presence of a number of visiting trance performers in the camp usually provide sufficient incentive for holding a dance.

3) *The presence of sickness in a camp.* Trance performers will come from far and wide to work on a patient.

Typical Dance-Trance Sequences

The dance begins about two hours after dark when a handful of women light the central fire and begin to sing. The songs are sung without words, in the form of yodelling accompanied by syncopated hand-clapping. There is a genera ly-known repertoire of about ten named songs (each commemorating game animals or natural phenomena), such as the Giraffe, Rain, God, and Mongongo Nut.[2] Each has a recognizable tune and associated dance steps, although there is no attempt to imitate in the dance the behavior or locomotion of the animal denoted by the name of the dance.

One can distinguish five phases of trance.

Phase I — Working Up — chaxni chi ('dance and song)

Soon after the women begin singing, some of the men enter the circle to dance. The elements of the men's dancing are: (1) tight, lunched posture; arms close to the sides and semi-flexed; parsimony of movement; body stiff from the waist up; (2) short, heavy footfalls, describing complex, rhythmic figures built on quarterand eighth-notes, into five- and seven-beat phrases; (3) objects used include chains of rattles tied around the ankles, a walking stick to support the torso, and a fly whisk; (4) men move in a line around the circle, occasionally reversing direction.

A dance lasts from five to ten minutes, after which there is a short break followed by another dance of equal length. The women determine the beginning and tie end of each number and the choice of songs. For the first two hours of dancing the atmosphere is casual and jovial.

Phase II — Entering Trance — n/um n/i nluma ('causing medicine to boil')

Several of the dancers appear to be concentrating intently; they look down at their feet or stare ahead without orienting to distractions around them. The body is tense and rigid. Footfalls are heavy, and the shock waves can be seen rippling through the Y

body. The chest is heaving, veins are standing out on the neck and forehead, and there is profuse sweating. This phase lasts from thirty to sixty minutes.

The actual entrance into trance may be gradual or sudden. In the first instance, the trancer staggers and almost loses balance. Then other men, who are not in trance,

[2] The Mongongo nut *(Ricinodendron rautanenii)* is the principal item of vegetable food in the Bushman diet. Depending on season this species will comprise 50%-90% by weight of the vegetable foods eaten.

come to his aid and lead him around in tandem until the trancer shouts and falls down in a comatose state, a state called 'half death' by the Bushmen. The sudden entrance, on the other hand, is characterized by a violent leap or somersault and an instant collapse into the 'half death'.

Phase III — 'Half Death' — Kweli ('like dead')

Now the trancer is stretched out on the ground outside the dance circle. While the others continue dancing, some men work over the trancer. They rub his body with their hands and with their heads. The purpose of this is to keep the body warm and to make it shine with sweat. The trance performer is rigid, with arms stiff at the sides or extended. His body may be trembling and he is moaning and uttering short shrieks.

It is noteworthy that many of the older medicine men, with years of experience in trance states, do not go through the 'half death' phase.

The culmination of the trance episode occurs when the performer rises up to move among the participants and spectators to 'cure'. The technique used is 'the laying on of hands'. The performer's eyes are half closed. He staggers, but never loses his balance completely. He rubs the subject with trembling hands and utters moans of rising intensity, punctuated by abrupt piercing shrieks. The trance performer goes from person to person repeating this action, ensuring that every person present is treated. He may break off curing to dance for a few minutes and this appears to reinforce the t'anced state and to forestall a premature return to the normal state. If there is a sick person present at the dance, each trance performer will make a special effort, often giving from ten to fifteen minutes of treatment to this one individual.

The active curing phase lasts about an hour, after which the trance performer usually lies down and falls asleep. It is common for medicine men to have two trance episodes per night, one around midnight and the other just after dawn. The dance continues all night, reaching a peak of intensity between midnight and 2 a.m., when the maximum number of medicine men are in trance. It slackens off in the predawn hours and then builds up to full strength again at sunrise with a renewed round of trances. The dance continues until midmorning and usually terminates by 10 or 11 a.m. Some memorable dances, however, continue throughout the day and into the following night, terminating thirty-six hours after they have started. What makes these marathon dances possible is the constant change-over of personnel. Although there are always from ten to thirty people actively participating in the dance, individuals are constantly entering or leaving the circle in four-to six-hour shifts.[3]

[3] A 16mm. black and white sound film illustrating a !Kung dance-trance episode is available from: Mr. and Mrs. L. K. Marshall, 4 Bryant Street, Cambridge, Massachusetts.

Variations in Trance

Throughout southern Africa the Bushman trance performances are known for their dramatic and mystifying forms of behavior such as fire-walking, fire-handling, and running amok. I observed many such episodes during my field work. However, it should be emphasized that such behaviors were not typical of the mature trancers of long experience. These violent exertions were largely confined to the young novices who would plunge into trance and exhibit uncontrolled reactions. They had to be forcibly restrained by the older men from injuring both themselves and others. The discipline displayed by the older men is the result of years of training, during which they learn to bring their reactions under control.

Fire-walking and fire-handling are the most dramatic forms of behavior among the novices. A dancer who is entering trance will breach the inner circle of seated women and dance through the flames of the central fire, scattering coals on the singers. Or he may reach into the fire, pick up handfuls of live coals, and rub them on his chest, face, and head. The latter action singes the eyelashes and eyebrows, and sets the hair on fire. Variations include somersaulting, squatting, kneeling, and crawling in or through the fire. Direct contact with fire varies in duration from one to five seconds, and often produces burns.

Another characterictic behavior of the novice is to run out of the camp into the bush at top speed. If he is not caught and dragged back to the dance, the novice may scratch himself severely or crash headlong into a tree. These exertions are regarded by the society as expectable of trancers who cannot yet control their medicine.

Several behavioral patterns occurred on only one occasion. I offer this list as an indication of the range of behavioral patterns defined as unusual by the Bushmen: (1) attacking a dog, grabbing it by the hind legs, and flinging it into the bush; (2) retching violently at the moment of entering the trance; (3) acting out sexual intercourse by pelvic thrusts; and (4) attempting to expose the genitals. All these actions were strongly disapproved of and the respective actors were forcibly restrained.

Folk View of Trance Performances

In this section I present the Bushman system of belief, i.e., the 'folk view,' which underlies the trance-complex. According to the Bushman belief, each tribe and race has its distinctive kind of medicine: the Bantu medicine consists of witchcraft and sorcery; European medicine is contained in pills and in hypodermic syringes; but Bushman medicine, or *n/um,* is a physical substance that lies in the pit of the stomach of *n/um kausi,* the 'medicine owner'. Medicine was given by God to Bushmen in the beginning, but men can transfer medicine from one body to another; this, in fact, is the main reason why trancers cure by the laying on of hands and by rubbing sweat. Normally, medicine lies dormant, and it is necessary to dance in order to heat it up. In the

Bushman's view, dancing makes the body hot. When the medicine reaches the boiling point the vapors rise up through the spinal column, and when the vapors reach the brain the dancer enters trance.

One informant described the experience verbatim:

> Bushman medicine is put into the body through in my belly and boils up to my head, like beer, singing and I start dancing, at first I feel quite
>
> middle, the medicine begins to rise from my stomach. After that, I see all the people like very small birds. The whole place will be spinning around, and that is why we run around. The trees will be circling also. You feel your blood become very hot, just like blood boiling on a fire, and then you start healing. When I am like this [i.e. telling the story], I am just a person. The thing comes up after a dance, then when I lay hands on a sick person, the medicine in me will go into him and cure him.

Here is another statement from the same informant, in response to the question, "Why do you dance in fire?"

> When I was first learning I stepped into the fire; now I am old and don't do it. The young ones in trance see the fire as if it is above their heads; they step in it because they think they are passing under it. When I stepped in fire I didn't burn my feet, because the medicine in my body is as hot as the fire; so when I stepped in I didn't get burned... If I were to step in fire right now, when my medicine is cold, I would bum myself.

Trance Symbolism

The key symbols and metaphors found in the trance-complex are the concepts of *boiling, fire, heat,* and *sweat.*

Boiling *(nlum* — 'to boil') refers not only to the boiling of water on the fire, but also to the ripening of plants. Water, like medicine, is dormant when cold, but powerfu when hot. Similarly, plant foods are do-mant when young and unripe, but become nutritionally potent when ripe. Thus, there is a symbolic association relating boiling water, cooked meat, ripened berries, and activated medicine. Sometimes this metaphor is extended, in a joking manner, to nubile maidens who have reached menarche. They are now considered 'ripe' for intercourse and impregnation.

Fire *(da) is* the source of heat *(khwi)* for boiling water, for cooking meat, and for activating medicine. The central fire symbolizes medicine, and the rubbing of live coals on the body was interpreted by one informant as a means of rapidly incorporating the sources of medicine. Another informant interpreted fire-rubbing as a means of heating up internal medicine. These two views are not necessarily contradictory. Trance

performers use the same word, *da,* to describe both the central dance fire and the fire, within their own bodies, which heats up the medicine.

Sweat *(cho)* is the most important of the trance symbols, for it is the palpable and visible expression of medicine on the surface of the body. Sweat is symbolically equated with the steam rising from boiling water and with the vapors that rise from the medicine boiling in the pit of the stomach. The production and transmission of sweat is the key element in the curing ritual. Illness is lodged at sites on the body of the sick person and can be driven out by the implanting of medicine.

There is an important contrast to be made between the Bushman sweat symbolism and that of the sweat-lodge and sweat-house religions of North American Indians. In these latter rituals, sweating is interpreted as a means of purifying the body (Lowie, 1924: 23–24; Mooney, 1965 1896]: 66–8; Wallies, 1939: 97). Perspiration, therefore, carries out of the body the negative or harmful substances. The Bushman belief specifies the opposite: sweat is *itself the positive and life-giving substance.* In the sweathouse, it is necessary for the patient to perspire in order to be cured; in the case of the Bushmen, it is the curer who must sweat in order for his medicine to be effective.

Among the !Kung, the active medicine in the curer's body is expressed on the surface of his body in the form of sweat. The main sites of sweat formation are listed by the Bushmen as: forehead, small of the back, chest, and armpits. However, the curer may use sweat from other parts of the body as well. The act of curing involves the laying on of hands, and the rubbing of medicinal sweat onto and into the body of the sick person. If the patient complains of chest trouble, the curer's attention will be focussed there; similarly, with other complaints located in specific organs,

the curer will work on the afflicted part. In this ritual it is not necessary for the patient to enter trance in order for the cure to be effective. Often three or four curers will work simultaneously, or in shifts, on the body of a sick person. Thus, there is no concept of ind vidual responsibility, whether the 'cure' is successful or unsuccessful. A demand of payment for the curer's service is not a common feature among the Bushmen, although some curers *do* receive payment when they are called in to give treatment to neighboring Bantu.

'Second Vision'

In addition to healing, another class of powers attributed to the trance performer comprises the ability to see the ghosts of ancestors, the ability to see at a distance, and the ability to employ X-ray vision.

Spirits of the dead may be responsible for causing sickness, and the ritual curer in trance is able to see such a spirit or shade hovering at the edge of the dance circle. These shades are invisible to all but the mot experienced curers. Having diagnosed the source of the illness, the curer then pleads with the ghost to make it go away. The following chant is used:

Why do you bother this one?

Go away and don't bother us; We love this man.

What have we done to you?

Some trance performers claim the ability to see distant scenes. On one occasion a performer stopped curing, walked to the edge of the circle of firelight and, facing north, ¿escribed the scene at a Bantu village forty miles away. On another occasion, a performer pointed to the horizon and announced that trouble was coming from the west. (As far as I know it never materialized.) This power was commonly attributed to trance performers, although I rarely observed its being exercised.

X-ray vision takes the form of determining the sex of infants *in utero.* I lack a statistically significant sample of these predictions (only ten births occurred during the study period), so I am not in a position to judge the effectiveness of this technique.

Were-Animals

The Bushmen believe that a few of the very powerful curers in the past had the ability to transform themselves into lions and to stalk the desert in search of human prey. Lions ordinarily do not attack man and the Bushman hunters occasionally drive lions off fresh kills in order to scavenge the meat. On the several occasions when a lion has attacked a man, the Bushmen attribute the attack to a human curer-turned-lion. Since such incidents occur perhaps once or twice in a decade, there is little reinforcement for belief in the malevolence of trance performers. (It is instructive that apart from this belief, all of the !Kung folk beliefs about trance performers assign to them a benevolent, positive, and socially constructive role.)

Mystical Protection

Positive evaluation of the trance performer's role is most clearly demonstrated in the performer's offering mystical protection to the people around him. It is the performer's duty to lay hands on all of those who are present at a dance, including men, women, children, and young infants. Thus, one sees the curers moving around the dance circle and through the spectators, treating each individual in turn, even though there is no sickness in the camp.

Recruitment and Training of Trance Performers

Much of the complex trance behavior is directed to the training of young men in the art of ritual trance. It is common to see three or four older trance performers working intently on a young individual who is deep in trance. The Bushmen believe that, in the beginning, medicine was given by God as a gift to men and that, since then, medicine

has been maintained by transmission from man to man. The practising curers spend much of their trance time implanting medicine in the bodies of trainees.

All the young Bushmen aspire to be medicine men, and those who have the vocation must spend several years in apprenticeship. The young boys grow up dancing; in adolescence they work hard at perfecting the intricate dance steps and take pride in showing off their skill to the girls. When a man marries, between the ages of twenty and twen y-five, he begins in earnest his attempts to enter trance. At dances these promising young men show serious concentration, staring fixedly as they dance, unlike the socially-oriented dancers who are casting their glances from side to side. At first, the young man experiences only mild dizziness. At subsequent dances he may experience spatial disorientation and nausea. If he shows an aptitude for trance then he will request an experienced performer, often his father, his uncle, or his father-in-law, to take him on as a pupil. He asks this man to give him medicine so that he may learn to heal the sick. It is the job of the teacher to lead the novice around the dance circle when the novice shows signs of near-trance. But it is also important that the teacher himself enter trance so that he can pour his active medicine into the novice. This process continues over a period of months, until, at one dance, the novice has a violent seizure. He plunges into the fire, runs off into the dark, struggles when restrained, kicks, squirms (perhaps injures himself), and finally, falls into the comatose state called naif death'. This is the most critical moment in the development of a ritual healer. For the first time he has shown clear evidence of a capacity for trance. His relatives show unmistakable joy in his success, for it means that another member of the camp will have the curing power. Yet, paradoxically, his success is manifested in violent anti-social behavior. He may splatter live coals and set the singers' clothing on fire. He may punch or kick the older men who are trying to help him, and he appears to be trying to injure himself.

The reactions of the onlookers to this violent display are puzzling. On the one hand, there is manifest consternation that the novice should behave so and criticism is voiced against his mentors, who are accused of allowing the novice to hurt himself. On the other hand, there is barely concealed delight on the part of the women, for the novice's success means another curer for his family and kin.

The Bushman's explanation of these violently anti-social episodes is that the medicine is extremely powerful and that the novice's first profound experience of trance is overwhelming. This explanation is, in part, a rationalization of his anti-social behavior, for the novice is well aware of the reactions that are expected of him. He has seen all curers initially exhibit 'wild behavior'. (I suggest that such behavior serves to ratify publicly the individual's achievement of the curer's status and, incidentally, to reinforce the people's belief in the awesome power of their medicine.)

When the novice is restrained and subsides, it is the job of his teacher, aided by other curers, to pour medicine into the novice's receptive body. Often three or four men work on the same subject, one laying on hands, another rubbing forehead sweat into the base of the spine, and others rubbing the chest, belly, and legs. In fact, great

attention is lavished on the novice and this intimate contact serves to ease the initiate through what must be a rather terrifying psychic experience. '

Having made the initial step, the novice now begins a long period of active trance-seeking. He predictably enters trance at each opportunity and, with the help of his mentor and other curers, he reduces by degrees the violence of his reactions. Some young men actually tour from camp to camp, wherever there is a possibility of dance occurring, so that they can get maximum exposure to trance-inducing stimuli. For several years they work at refining their technique, until finally they are able to enter and function in trance with the parsimony of movement and the controlled intensity that is the culturally-defined ideal. Some men continue to cultivate trance throughout life (such as one curer who could always be counted on to be the first 'in' and the last 'out' at any dance he attended), while others, having completed their apprenticeship, enter trance only when there is a specific case of sickness to be dealt with.

Discussion

Bushman Trance in the Context of Altered States of Consciousness (ASC)

The foregoing description of the characteristic behavioral patterns and phenomenology of trance performances enables us to place the !Kung Bushman material within the broader context of ASC theory, as presented by Arnold M. Ludwig (this volume). Ludwig's typology outlines the factors involved in the production of altered states of consciousness. In this scheme, ASC's may be produced as a result of either a *reduction* or an *increase* in the level of exteroceptive stimulation and/or motor activity. The latter mode of production (increase of stimuli) characterizes the !Kung Bushman trance performances, as it does other kinds of 'hyperalert' and 'hyperkinetic' trance states such as those observed in religious revivals, possession cults, ecstatic cults, and fire-walking trances. Also included in this category are certain clinical psychotic syndromes such as battle fatigue. The phenomenology associated with these states will vary according to the cultural and/or clinical setting (Wallace, 1959), but what appears to be common to most of these trance states is the presence of hyperactivity, increased excitement, and vigorous, often violent, expenditure of energy.

The Bushman trance performances are a case in point. The most striking characteristic of trance induction is the amount of *hard work* involved. This is manifested in the performer's heavy foot-stamping, forced breathing, muscular tension, abundant perspiration, and subsequent signs of exhaustion. It is clear that a considerable mobilization of adrenalin occurs during the trance episode, as evidenced (in some cases, but not in all) by aggressive behavior (punching and kicking), by flight reactions (running away), and by constant shivering and muscular spasms.

Just as the attainment of trance involves mobilization of adrenalin, so does the trance state provide a ritualized context for energy expenditure in the form of running, trembling, and shrieking. Since the Bushman social ethic places a high value on harmony and on the avoidance of conflict leading to violence, it is a reasonable inference that the trance performance provides a socially approved outlet for forms of behavior that would be considered objectionable in the context of normal interpersonal relations.

Under the heading of 'General Characteristics of ASC's,' Ludwig considers ten kinds of alteration in subjective experience as brought about by trance states, including changes in thinking, time-sense, control, body-image, and perception, as well as changes in the meaning or significance of subjective experience. These categories are, of course, not mutually exclusive, nor are they equally applicable to the subjective experience of Bushman trance performers.

Perceptual distortions and changes in body-image are clearly in evidence in the statements of Bushman trance performers. All of my informants reported experiencing the sensation of boiling in their stomachs, the sense of being elevated above the ground (or of the ground being elevated above them), and the sense of becoming larger than the surrounding people (or of the people becoming smaller). All informants expressed the feeling that during trance their bodies became charged with vibrant energy.

It is difficult to relate all of Ludwig's 'characteristics' to the Bushman material. Such terms as 'change in meaning,' 'selfrevelation,' and 'sense of the ineffable' are suggestive, but they appear to be inappropriate in a cultural context in which there is such a high degree of general agreement on the subjective content of the trance experience. My limited interview data are sufficient only to give a general outline of the Bushman folk views of trance experience. More field research will be necessary before a fully adequate account of trance phenomenology can be made.

Trance, Shamanism, and Witchcraft

The !Kung Bushman trance-complex resembles, in some ways, the classic shamanism of Siberia and native North America (cf. Bogoras, 1904–9; Lowie, 954). Both the Bushman and the shaman complexes emphasize individual trance as a means of activating extraordinary healing powers. In addition, the trancecomplex, as a system of explanation of misfortune, has some correspondence to the institution of witchcraft found in many nonEuropean societies (cf. Kiuckhohn, 1944; Evans-Pritchard, 1937). However, the Bushman case differs from shamanism and witchcraft in critical areas and an examination of these contracts will serve to illuminate the role of trance in Bushman life and its underlying logic.

The well-known distinction between the *shaman,* "whose powers come from direct contact with the supernatural," and the *priest,* who ' learns a body of codified... ritual knowledge from older priests" (Lessa and Vogt, 1958: 410), is blurred in the Bushman

context. Unlike the shaman, who contacts directly with the spirit world, the Bushman trance performer derives his power from *within* the social body.

The Siberian shaman, for example, is a lone figure whose power comes from 'spirit possession'. This supernatural contract tends to alienate the shaman from his community and it is significant that that the shamanistic role serves as an outlet for emotionally unstable individuals (Bogoras, 1904–9). In American Indian societies, such as the Pawnee (Lowie, 1954: 161), the shamans as a group are set off from the community in a formal fraternity of medicine men. In a number of African societies, the shaman may assume the role of an authoritarian prophet-figure and may gather around himself a considerable following (c ., Nadel, 1946). In all these cases, the medicine men, both collectively and individually, are regarded by the laity as awesome and potentially dangerous.

The Bushman trance performer, by contrast, maintains strong social ties with the community. Indeed, the very process of recruitment and training of performers forges bonds of affection between the novice and his mentors, and between the curers as a group and the rest of the community. The Bushman curers do not form an exclusive minority of unusually gifted men, nor are they organized into a secret society with special access to the mysteries. The abilities to enter trance and to cure are possessed by half of the adult men (and by a number of the women who perform in the drum dance). When every extended family can count among its members one or more curers, it becomes clear that the charisma accruing to the role of trance performer must be shared out among many.

'his close identification of the trance performer with the community at large becomes evident when we consider the logic underlying the Bushman conception of the sources of healing power and the sources of misfortune. The Bushmen regard healing power as being derived from other living men. Illness and misfortune, however, are brought mainly by the spirits of the dead and by other forces external to the living. In other words, they seek *within* the social body for benevolent powers, but project the blame for malevo once to forces *outside* the social body. Such a conception of health and disease serves to bind together the living in a common front against hostile external forces.

Societies in which sorcery, shamanism, and witchcraft are prevalent divide good and evil into a radically different projective system. In these societies, malevolence springs from *within* the social body, as well as from without. Witches, sorcerers, and wizards are all conceived of as living human beings who, willfully or unknowingly, cause harm. To combat this malevolence, the individual may resort to counter-sorcery himself, or he may seek the support of an oracle, a diviner, or a shaman sympathetic to his cause. It is true that in witch-oriented societies not all evil is defined as coming from the living. However, the logic of the system leads inevitably to such features as good and bad shamans, good and bad sorcerers, and a spiral of magical attack and counterattack. Among the Yokats Indians of California, for example, shamans could use their supernaturally-derived powers for good or for evil. Gayton (1930) recorded

cases of shamans in competition, each trying to kill the other, and shamans in collusion, one causing illness and another curing it.

The general point to be mace is that when misfortune strikes a member of a witch-oriented culture, he is likely to seek its source among the living members of the community. In many cases, the prime suspects are the individual's close relatives (Bohannan, 1957; Nadel, 1952; Evans-Pritchard, 1937). The hostility which is an inevitable by-product of interpersonal relations is thus translated from the realm of the profane into the realm of the sacred. Nevertheless, the hostility must be absorbed largely by the social body. Tae Bushmen, simply by attributing misfortune to an external source, have evolved a projective system which *dissipates* interpersonal hostility, instead of *intensifying* it.

It would be misleading to allow the reader to draw the conclusion that all the problems of social living are resolved by the Bushmen in the trance performance and its associated system of explanation. Although the role of 'witch' is not an institution of Bushman society, there is a prevalent belief that a living man *can,* willfully or unknowingly, cause harm to others by neglecting to propitiate his ancestors.

I cite a case in which two old men, Kumsa and Neysi, had been feuding with each other over a period of years. Once, when Kumsa became ill, he complained that Neysi was indirect y the source of his difficulty. This accusation of 'witchcraft' took the following form :

> Neysi has spoken ill of me.
>
> His ancestors have overheard these words and now they have come to bother me. Why can't Neysi control his ancestors?

In order to clear himself of the charge, Neysi was required to come to Kumsa's bedside and to plead publicly with his offending ancestors to leave Kumsa in peace. In this ritual of reconciliation, Neysi used an incantation that is similar to that used by a trance performer when he sees a ghost hovering at a dance.

> This territory here is ours to share. Now the ghosts should just go away and let this man live in peace...
>
> Because of my words
>
> the g iosts are trying to kill Kumsa.
>
> Now I say: Kumsa is my child.
>
> Ghosts! Go away!

However, this incident was an isolated occurrence. By far the more common attribution of malevolence was to a ghost who was acting entirely of its own volition. Thus, it is clear that there is a lack of closure between the belief that the ghost of ancestors may bring illness, and the belief that the living can influence their ancestors. If there

were closure, then it would follow that misfortune was due mainly to the agency of living people; and thus, the logic of the Bushman system would correspond to the logic of witchcraft.

In conclusion, it is evident that the distinctive features of the Bushman trance-complex, mentioned at the outset, form a coherent pattern that is internally consistent and, at the same time, is congruent with other features of their culture.

The attainment of trance is a co-operative enterprise involving both women and men. The trance performance itself is characterized by a lack of secrecy and a high degree of mutual aid. The psychological rewards of the trance experience are available to a high percentage of the adult men of the community. Al members, including women and children, enjoy the benefits offered by the mystical protection of the curer. The socially positive evaluation of the trance pe ormer's role in society is congruent with the Bushman belief that misfortune springs largely from the dead, and not from the agency of living men.

The !Kung Bushman trance performance can be regarded as a drama in which the stresses and tensions of social life are transformed into a common struggle against external sources of malevolence.

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Part II: Nature and Methods

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Trance States and Ego Psychology

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Examples of trance or possession states can be found in almost every culture. However, because the differences among trance states are far more numerous than are their similarities, it has been difficult to generalize meaningfully about basic similarities. Attempts by past workers to describe various kinds of trance states as closely related phenomena were usually undertaken from too specialized a frame of reference, so that researchers were never fully able to reconcile different trance-state manifestations within a unifying theoretical framework. Attempts to explain trance states in psychological terms have been relatively rare, and such attempts have usually been undertaken from a very limited viewpoint and have attempted to do nothing more than equate certain trance states or trance-like phenomena of Western culture with trance states of other cultures.

Hypnosis is a trance phenomenon of Western culture which has been studied in detail, especially with regard to the psychological explanations of its external manifestations. In the present paper, an attempt will be made to apply the insights gained from an ego-psychological interpretation of hypnosis to an investigation of trance states in general. A systematic examination of the phenomenon of hypnosis will, hopefully, reveal the crucial features of the hypnotic reaction that can be utilized in a psychological explanation of trance states of all kinds.

The present analysis of trance states rests upon the basic assumption that trance states are a class of ego mechanisms designed to allow for the discharge of basic drives in a goal-oriented manner. These ego mechanisms can also serve other adaptive and defensive purposes. A second basic assumption for this transcultural comparison of trance states is that certain basic drives indigenous to Western culture are, in fact, universal and that it is only in the expression or in the discharge form of these drives that cultural determinants intervene; that is to say, although cultural factors do not determine the nature of any basic drive, they do determine how the drive discharge is modified for each individual within a given socio-cultural framework. Cultural prescriptions determine what are proper or improper expressions of basic drives. The drive derivatives manifested by the subject are, in the end, limited by what his society defines as normal or abnormal, and by which of these derivatives the subject knows will be encouraged, tolerated, or discouraged. It is with respect to these directives concerning the way in

which a drive is to be properly expressed that we find tremendous differences between cultures, within cultures, and even within cultures at different periods of time.

This can be illustrated by examining a specific and limited area of drive discharge. For example, the sexual drive can be modified in its expression by cultural determinants. Homosexuality is a form of behavior that illustrates this modification of sexual drive, since it is a universal, easily-recognized, and well-defined phenomenon; and because of these characteristics it is well suited for use in a transcultural comparison. The following outline reveals that there is considerable variation between cultures in the expression of the sexual drive in the form of homosexual behavior.

The incidence of homosexuality is directly related to prevailing socio-cultural attitudes, and such attitudes have varied from outright sanction to outright prohibition and punishment (Opler, 1965). The ancient Greeks and the pre-Meiji Japanese gave general, outright sanctions to homosexuality. In other cultures, only certain status groups are permitted to practise homosexuality; for instance, the Lowly Nata slaves in South America and the revered shamans in the Siberian Chukchee culture. Most cultures in the modern world tend to restrict the practice of homosexuality, or to tolerate it without sanctions only within unofficial, but well-defined, geographical locations. Furthermore, the attitude toward homosexuality is not uniform over any considerable period of time within a culture; for instance, Taylor (1965) notes that the preChristian Mediterranean cultures were all tolerant of homosexuality. Yet, at p esent, homosexuality is found to be very unacceptable within this same cultural area. Therefore, the degree and the direction of the expression of certain drives are evidently very much a function of the attitudes of a given society.

An ego-psychological approach must examine not only the defensive and drive-release aspects of ego mechanisms, but their adaptive functions as well. In this regard, the present study assumes that despite the many external differences of various trance states, all trance states have basic, underlying ego mechanisms in common. At the same time, the study also assumes that a systematic and thorough appraisal of trance states cannot be made by simply examining the reactions of the individual and that consideration must be given to all elements which contribute to the final form of manifested behavior patterns. Therefore, an examination of trance states must include an examination of individual variables, interpersonal variables, and socio-cultural variables. Trance states can be viewed in terms of situational demands, just as they can be viewed in terms of individual dynamics. The form, the purpose, and the limits of each trance state can be understood only by considering the individual and his psychological structure within a given situational and cultural context.

Analysis of Hypnosis

Detailed examination of hypnosis reveals, surprisingly enough, that hypnosis is not at all the systematized or uniform phenomenon that one would expect it to be (van der

Walde, 1965). Indeed, hypnosis seems very much a product of situational and cultural demands, rather than a stable, sterotyped reaction to specific stimuli. This fact can be illustrated through reference to several different features of hypnosis.

1) *Change in the form of hypnosis with time.* The external form of hypnosis has changed considerably from the time of Mesmer to the present. In Mesmer's time, the so-called Mesmeric phenomenon was characterized by a crisis (usually a convulsion) within the hypnotic induction procedure. This was followed by lethargy and stupor, and, hopefully, the desired effect which had led the subject to seek Mesmeric treatment in the first place. Obviously, the form of hypnosis manifested in Mesmer's time was very much in keeping with the concept of disease in the 18^{th} century, i.e., the notion that disease was an intensely problematic phenomenon and was usually resolved only after a dramatic crisis had occurred. Mesmeric hypnosis was very much disease-and-cure oriented and so agreed with this model. The modern concept of hypnosis is much different, and hypnosis today is usually manifested by a sleep-like state and a relationship to the hypnotist wherein the subject will automatically and uncritically follow his dictates. If hypnosis were indeed an unvarying phenomenon and its manifestations a group of stable, prescribed responses to a given stimulus, these manifestations would not vary to such an extent. The change in appearance seems to be significantly related to the fact that hypnosis is very much a product of the cultural environment in which it occurs. The form of hypnosis has changed as the expectations, the preconceptions, and the demands of the culture within which it is practised have changed.

2) *Difficulties in demonstrating the presence of hypnosis.* A large number of modern investigations have shown that there are really no verifiable objective or subjective criteria that may be used to determine when hypnosis is or is not present. These investigations also indicate that under scientific investigation, hypnosis does not manifest any unique properties, nor hypnotic subjects any unique abilities.

At the present time, there are no reliable ways of demonstrating the presence of hypnosis other than through accepting the vague statements of the subject; for example, "I know I am in hypnosis, because I know I will do what you tell me to do." Therefore, hypnosis seems more a frame of mind than it does an independent state of consciousness. It is this vagueness characteristic of hypnotic manifestations that leads the author to conclude that the form of hypnosis is intended to be vague so that the subject is more readily able to respond to given demand situations, which tend to vary considerably.

3) *Hypnosis as a product of situational demand.* Many modern researchers have demonstrated experimentally that hypnosis is very much related to situational demand. Orne (1959), for example, introduced a previously unheard-of manifestation into his subject's hypnotic reactions simply by informing his subjects beforehand that this was a typical and expected manifestation of hypnosis. The manifestation picked by Orne was, very specifically, one which could not have occurred by chance. Therefore, hypnosis can be regarded as the product of a transactional situation wherein, for some reason, the subject responds to both the specific and implied demands of the situation.

Past investigations of hypnosis have, on the whole, examined the phenomenon from a rather limited frame of reference. A psychological explanation of hypnosis which disregards cultural determinants, requires the inclusion of all elements of the hypnotic reaction if it is to lead to a proper understanding of hypnosis. A descriptive definition of hypnosis can be stated thus: hypnosis is the presence of an induced trance or altered state in which the subject automatically and uncritically carries out the suggestions of the person inducing the altered state. If this definition is accepted, then a practical explanation of hypnosis must include the following variables: the hypnotist, the hypnotic induction procedure, the subject, and the subject's trance and hypnotic behavior.

The author has formulated such an analysis in the previously referred-to paper (van der Walde, 1965). His findings indicated that the essential prerequisite to hypnotic reaction is unquestionably the subject's motivation. Hypnosis was seen to be a goal-oriented phenomenon wherein the subject hopes to achieve some desired end. A review of the motivating aims of the hypnotic subject also suggests that the motivation of the subject's participation in the hypnotic reaction is highly individual and depends upon a variety of needs and desires. Most often, it is unacceptable wishes that are gratified in the hypnotic situation. The hypnotic subject is able to derive his gratification either from the hynotic relationship or as a result of hypnotic behavior. The subject, and not the hypnotist, prescribes the extent and the expression of the wishes gratified in hypnosis. Therefore, hypnosis must be viewed, first and foremost, in terms of the subject and his motivational impulses. Phe iiypnotic reaction can be seen as function! ig to support the subject's obtaining a desired end, under conditions which seemingly allow this to be done safely; i.e., in hypnosis, there is some form of sanction and reward for the subject's actions, which otherwise might not be forthcoming.

The hypnotist, on the other hand, is important only as a transference figure. In fact, one might regard him as entirely nonspecific in relation to the hypnotic reaction. This is confirmed by a multitude of successful hypnotists, and by the fact that responses to the hypnotist are completely unrelated to the hypnotist's ability or to his g'asp of the hypnotic induction procedure. Furthermore, in many instances subjects can be hypnotized simply by having them listen to a recorded induction procedure. If the hypnotist were vital to the production of the hypnotic reaction, this would not be possible. The subject's response to the hypnotic induction procedure, therefore, is related more to the subject's own preconceived notion of what a hypnotist should be than it is to what a hypnotist really is. The hypnotist, in effect, is a culturally approved authority or sanctioning figure upon whom many fantasies involving omnipotence are projected. It is through this fantasied, omnipotent figure that gratification is obtained. The hypnotist ostensibly allows this to happen, and because hypnosis is supposedly caused by the hypnotist, the subject and hypnotist, by mutual agreement, place full responsibility for all that occurs within the hypnotic trance in the hands of the hypnotist. Thus, responsibility for all that happens as part of the hypnotic reaction is projected on to an allegedly omnipotent figure, who, because of his omnipotence, obviously does not

have to answer to anyone for these happenings; and, as a result of this allocation of responsibility, the subject too is relieved of the need to answer for his actions.

The hypnotic induction procedure, because of the large variety of successful procedures, is obviously only a secondary part of the hypnotic phenomenon. This fact is further emphasized by the observation that some subjects have been reported to enter trance before the hypnotic induction procedure had even started. Basically, the hypnotic induction procedure is a ritual which fits the preconceptions of both the hypnotist and the sub ect, and it implies that if the subject follows the prescribed ritual, he will be entitled to all the benefits to be derived from the hypnotic relationship. The subject, by following this ritual and by reacting appropriately, indicates non-verbally that he understands what is expected of him within this specific situation.

The hypnotic induction procedure usually involves a large element of sensory deprivation which makes many of the suggested responses easier to achieve. Neither the hypnotist nor the subject critically examines the fact that many of these reactions, if not all of them, would occur outside the hypnotic induction procedure even if only the sensory-deprivation procedures were followed. These sensory-deprivation procedures ask the subject to voluntarily abdicate the use of his major reality-testing sensory modalities (vision, motion, and feedback therefrom). Thus, the subject experiences his environment with only those sensory modalities which are normal adjuncts to his major reality-testing sensory modalities. Hence, he experiences a greatly altered view of both himself and of the world, and, if the subject is properly motivated, he can accept this as proof of altered reality and of an altered bodily state. Such alterations are further accepted as proof of the hypnotist's omnipotence, because to all appearances it is merely through the use of words that the hypnotist has brought about this special state of altered reality.

Trance and hypnotic behavior, neither of which can be documented scientifically, serve to demonstrate non-verbally to both the subject and the hypnotist that the subject has complied with the hypnotic induction procedure and the demands of the situation, and that the subject is therefore eligible for all the rewards that are implied by the hypnotic situation. The altered body-image of the subject creates the illusion of alterations in identity, setting, and reality, so that normal rules of behavior no longer apply and superego condemnation for gratification of unacceptable wishes is no longer applicable, with the result that guilt and inhibition are absent. Both subject and hypnotist fail to acknowledge that the perceptual distortions experienced by the subject are attainable in all people, and that such distortions depend exclusively on the subject s co-operation for their presence. They are not a sign of he hypnotist's power, but are, rather, evidence of the subject's willingness to be convinced of the hypnotist's power and to assume the role of hypnotized subject. (It is interesting to note that many examples of trance states also utilize a focus on altered perceptions of the environment, which are then elaborated into some rationale for the given activity.) Neither the hypnotist nor the subject examines very critically ti e entire situation, since both derive considerable gratification from the hypnotic reaction; the subject as

noted previously, and the hypnotist from the feelings of omnipotence that he derives from being able to control somebody else by words alone.

In summary then, hypnosis is the mobilization of a group of ego mechanisms designed to obtain for the subject gratification of usually unacceptable wishes, to avoid intolerable stress situations, and to avoid superego condemnation while doing so. Superego condemnation is avoided by the hypnotic ego mechanisms since they serve to blot out conscious awareness that unacceptable goal-oriented activities are occurring during the hypnotic situation, while simultaneously allowing the subject to project responsibilities for his actions onto another person, namely, the hypnotist. Thus, hypnosis is not a stereotyped reaction to specific stimuli, but is, instead, a dynamic, adaptive, and goal-oriented process.

Transcultural Comparison of Hypnosis and Other Trance States

The following transcultural comparison of hypnosis and other trance states depends very much upon the principle of situational demand. This principle has been seen to be operative in hypnosis both in terms of culturally determined preconceptions and in terms of specific situational demands within the cultural context. It is therefore suggested that an understand ng of other trance phenomena may be acquired by regarding such phenomena as further examples of situational-demand manifestations.

The characteristics of the hypnotic reaction which can best be used as a basis for comparison and contrast are the following:

1) The given form of trance is accepted, tolerated, or encouraged by a given culture or society, either for an entire culture, for a social group, or for specific individuals within the culture or society.

2) A goal-oriented activity is associated with the trance state and is accepted, tolerated, or encouraged so long as it occurs within the trance state. Frequently, the same goal-oriented activities are not tolerated either by the individual or by his society when pursued in a non-trance state.

3) There is usually present a real or fantasied authoritarian figure who is regarded as responsible for controlling the trance state. This figure of authority is endowed by the individual and his culture with specific powers which he does not actually possess. This figure of authority, therefore, is charismatic, though only in the fantasy of the society or the individual. The basic function of the authoritarian figure seems to be to represent a cultural sanction for the wanted or desired activity, and, by his presence, to help bring it about.

4) There is also involved a prescribed, often formalized ritual which serves as a contractual ceremony. The contract defines the roles of the participants with regard to the trance state, and finalizes the agreement that each of the participants is willing to

accept his role within the specific situation. This ritual, therefore, defines the specific relationship between the individuals participating in the trance situation, a re ationship which in hypnosis has often been called the 'transference relationship'.

5) Trance state and hypnotic behavior are non-specific and basically are responses to ritual activity and to the preconceptions which the individual has acquired during development within his culture. The manifestations of the hypnotic reaction confirm the presence of a special situation wherein behavior that is normally discouraged or condemned by society or by the superego becomes acceptable within the special situational context.

Transcultural Comparisons

For the purpose of illustration, transcultural comparisons will be made concerning two other trance phenomena, one from Western culture and one from Oriental culture.

1) *Religious conversion experience.* Religious conversion experiences are often accompanied by what have been described as 'altered states of consciousness'. Quite obviously, this kind of trance state is both accepted and tolerated within our culture for most individuals, although not all individuals within our culture would allow themselves to participate in such activity. The goal-oriented activity associated with this trance-like state seems to be the quest for salvation and for forgiveness of past sins, i.e., the endeavor to assuage a sense of guilt. Furthermore, this trance-like state can be utilized by given individuals for many other purposes; at times, for example, for no other reason than to become an active member of a group and to experience a sense of belonging.

The real or fantasied authority-figure in this case is a 'supreme being,' who can be represented on earth by a minister, evangelist, statue, or shrine. There is no question about the presence of a formalized ritual which serves as a contractual ceremony; for example, the evangelist obviously attempts to create a specific, emotionally-charged situation, and the audience is asked both to join in and to eventually exper ience a profound emotional charge. The trance state and attendant behavior have all been well documented. These vary considerably in various sects, but are most pronounced in the Southern fundamentalist sects, where a very stereotyped and violent reaction is provoked. This reaction, in fact, is in many ways reminiscent of Voodoo rites and of the Mesmeric phenomenon, and is similar to sexual and aggressive release phenomena. The explosive, convulsive nature of this reaction is often followed by stupor, and afterwards by a feeling of well-being. These reactions indicate, in no uncertain terms, that the subject has signed the contract.

2) *Trance in Bali.* The following discussion will utilize the analysis of Balinese trance states made by Gill and Brenman (1961) in *Hypnosis and Related States.* The trance state in Bali is encouraged in three specific social situations. These are the witch play,

the *sangiang* trance-dance done by young girls before menarche, and the trance of the village seer.

Gill and Brenman in their analysis of the Bali trance states frequently comment on the fact that the Balinese use the trance as an opportunity to express some pent-up emotion and to then withdraw into a protective stupor. The trance, therefore, provides an opportunity to release or gratify certain drives in a socially acceptable situation or, as in the second instance, an opportunity to withdraw from the cares of the world. These functions are highly adaptive in Balinese society, where the expression of emotions is rigidly restricted.

The role of the trance of the village seer is also adaptive, and this seems to be a ritualized method of affecting some change in the Balinese culture by having the gods speak through the mouth of a seer while she is in trance. The societal endorsement is evident since the seer's words are considered divine. Bateson and Mead stated that these trance states are an essential Balinese social organization, "for without them life would go on forever in a fixed and rigid form, foreordained but unguessed in advance — practised seers whose task it is to let the gods or ancestors speak through them, giving small deft turns for the course of events by suggestions spoken when in the state of trance." Obviously, the trance state in Balinese culture can serve a useful function not only for individuals within the culture, but also for the culture or society as a whole.

The role of the authority-figure (or figures) in the Balinese trance-dance is easily seen, for most of these trance-dances are performed by children, and in Bali the gods are thought of as 'children of the people'. "Speaking through the lips of those in trance, the gods address the villagers as Poppa and Momma... The god is both god and child, powerful and weak, and the child is both child and god, petulant and sacred."

The rituals of the Balinese trance states are highly formalized; each of the participants in the ritual knows his part exceedingly well because of the long indoctrination he has received from his society. Trance state and trance behavior follow automatically and uncritically, and all who participate in the formalized ceremony readily acknowledge their role. By their participation they not only benefit themselves, but also their society, and, at the same time, they reaffirm their strong bonds to their society and to its welfare.

Summary

Hypnosis, a trance state common to Western culture, is analyzed in order to determine the basic characteristics of the phenomenon. These elements, comprising individual, interpersonal, and cultural variables, are then utilized in a transcultural comparison so as to demonstrate the fact that trance phenomena are goal-oriented behaviors expressed by individuals within a given culture by methods which are culturally sanctioned for achieving these ends. The differences between trance states can be understood, therefore, to represent cultural variants of similar psychological mechanisms.

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Altered States of Consciousness

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Beneath man's thin veneer of consciousness lies a relatively uncharted realm of mental activity the nature and -unction of which have been neither systematically explored no adequately conceptualized. Despite numerous clinical and research reports on daydreaming, sleep and dream states, hypnosis, sensory deprivation, hysterical states of dissociation and depersonalization, pharmacologically-induced mental aberrations, and so on, there has been little attempt made to organize this scattered information within the framework of a comprehensive theoretical system. It is my present intention to integrate and discuss current knowledge of various altered states of consciousness in an effort to determine (a) the conditions necessary for their emergence, (b) the factors which influence their outward manifestations, (c) their relatedness and/or common denominators, and (d) the adaptive or maladaptive functions which they serve.

For the purpose of discussion, I shall regard 'altered states of consciousness' (hereafter referred to as 'ASC's') as those mental states, induced by various physiological, psychological, or pharmacological maneuvers or agents, which can be recognized subjectively by the individual himself (or by an objective observer of the individual) as representing a sufficient deviation, in terms of subjective experience or psychological functioning, from certain general norms as determined by the subjective experience and psychological functioning of that individual during alert, waking consciousness. This sufficient deviation may be represented by a greater preoccupation with interna sensations or mental processes than is usual, by changes in the formal characteristics of thought, and by impairment of reality-testing to various degrees. Although there are some conceptual pitfalls in such a general definition, these pitfalls are more than compensated for by the wide range of clinical phenomena which can now be considered, and hence studied, as presumably related phenomena.

Production of ASC's

ASC's may be produced by a wide variety of maneuvers and may appear in almost any type of setting. They may be deliberately induced by the individual himself (e.g., meditative states, sleep, the ingestion of drugs) or they may arise accidentally and unpredictably (e.g., auras, toxic dele: ia, highway trance). They may be produced in

artificial settings (e.g., stage hypnosis, brainwashing, experimental sensory deprivation) or in a more natural setting (e.g., religious revivals, tribal ceremonies, dance parlors). They may arise spontaneously within an individual while he is engaged in some solitary activity (e.g., prayer, autohypnosis), or while he is in the presence of a charismatic leader in either an interpersonal or group setting.

In general, we shall fine that ASC's may be produced in any setting by any agents or maneuvers which interfere with the normal inflow of sensory or proprioceptive stimuli, the normal outflow of motor impulses, the normal 'emotional tone,' or the norma flow and organization of recognitive processes. There seems to be an optimal range of exteroceptive stimulation necessary for the maintenance of normal, waking consciousness, and levels of stimulation either above or below this range appear conducive to the production of ASC's (52). Moreover, adopting Hebb's views (29), we also find that varied and diversified environmental stimulation appears necessary for the maintenance of normal cognitive, perceptual, and emotional experience, ano that when such stimulation is lacking, mental aberrations are likely to occur. And although there is a scarcity of experimental evidence concerning the manipulation of motor, cognitive, and emotional processes, there seems to be ample clinical and anecdotal evidence to suggest that gross interference with these processes may likewise produce alterations in consciousness.[1]

In specifying the general methods employed to produce ASC's, I should like to emphasize that there may be much overlap among the various methods and that many factors other than those listed may be operating. Nevertheless, for the sake of classification I have categorized the various methods on the basis of certain variables or combinations of variables which appear to play a major role in the production of ASC's.

A. *Reduction of Exteroceptive Stimulation and/or Motor Activity*

In this category are included mental states resulting primarily from an absolute reduction of sensory input, from a change in patterning of sensory data, or from constant exposure to repetitive, monotonous stimulation. A drastic reduction of motor activity also may prove an important contributing factor.

1. Highway or road hypnosis (71)

2. Brea .off' phenomena in high altitude jet pilots (6)

3. Mental aberrations while at sea (1, 26, 86), in the Arctic (13, 80), or on the desert

4. Experimtenal sensory deprivation states (30, 51, 96)

5. Alterations in consciousness associated with solitary confinement (12, 67) or prolonged social isolation, such as commonly practised by ascetics or mystics

6. Post-cataract operation psychoses (9)

7. Nocturnal hallucinations, especially in elderly persons

8. Mental aberrations in elderly cataract patients (3)

[1] See R. Shor's excellent theoretical article (85) concerning the conditions necessary for the emergence of trance, a term roughly similar to my usage of ASC.

9. Extreme boredom (31)

10. Alterations in consciousness in poliomyelitis patients placed in a tank-type respirator (68)

11. Mental aberrations in polyneuritis patients with sensory anesthesias and motor paralysis (47)

12. Mental phenomena experienced during profound immobilization in a body cast or traction (47)

13. Hypnagogic and hypnopompic states

14. Sleep and associated phenomena, such as dreaming, somnambulism

15. Healing and revelatory states during 'incubation' or 'temp e sleep,' as practised by the early Egyptians, Greeks, and Romans (53)

16. 'Kayak disease,' found in Greenlanders spending several days in a kayak while hunting seals (95)

17. Hypnotic trance (42)

B. *Increase of Exteroceptive Stimulation and/or Motor Activity and/or Emotion*

In this category are included excitatory mental states resulting primarily from sensory overload or bombardment, which may or may not be accompanied by strenuous physical activity or exertion. Profound emotional arousal and mental fatigue may also be major contributing factors.

1. Suggestible mental states produced by 'third degree' tactics, such as grilling and verbal badgering (82)

2. Brainwashing states (82)

3. Experimental 'hyperalert' or 'hyperkinetic' trance states secondary to tension-induction maneuvers (60)

4. Dance- and music-trance in response to jazz, rock-n-roll, rhythmic drumming

5. Hyperkinetic trance states associated with emotional contagion, often encountered in a group or mob setting (46), such as manifested by mass hysteria or the St. Vitus and tarantism dancing epidemics of the Middle Ages (64,95)

6. Religious conversion and healing trance experiences during revivalistic meetings (15, 38, 44, 82)

7. Mental aberrations associated with certain rites of passage (e.g., puberty and initiation rites), such as found in initiates to manhood status in some primitive tribes (82) or the Greater Eleusinian Mysteries

8. 'Spirit possession' states, either by the Holy Spirit or tribal spirits, during revivalistic or tribal religious ceremonies (5,22,38, 44, 79, 82)

9. Shamanistic, divination, and prophetic trance states during certain tribal ceremonies (22, 72)

0. Ecstatic trance, such as experienced by the howling' or 'whirling' dervishes during their famous *devr* dance (95)

11. Trance-like states experienced during prolonged masturbation

12. Orgiastic trance, such as experienced by the Bacchanalians (20) or Satanists (70) during certain religious rites

13. Fire walker's trance (90)

14. Alterations in consciousness arising primarily from inner emotional turbulence or conflict, or secondary to external conditions conducive to heightened emotional arousal (82) *a)* fugue states, amnesias, traumatic neuroses (27) *b)* battle fatigue (82)

c) panic states, rage reactions

d) increased suggestibility, illusions, etc. resulting from prolonged fear (82)

e) depersonalization

f) hysterical conversion reactions, dreamy and dissociative states

é) berserk, latah, and whitico psychoses (2)

h) bewitchment and demoniacal possession states (24, 25, 36, 56, 70)

i) acute psychotic states, such as schizophienic reactions

C. *Increased Alertness or Mental Involvement*

Included in this category are mental states which appear to result primarily from focused or selective hyperalertness with resultant peripheral hypoalertness over a sustained period of time.

1. Trance phenomena resulting from prolonged vigilance, such as during sentry duty, crow's nest watch, etc.

2. Trance states reported among radar screen operators (3.1)

3. Alterations in consciousness resulting from intense mental absorption in a task, such as reading, writing, problemsolving

4. Fervent praying (8, 81)

5. Total mental involvement in listening to a dynamic or charismatic speaker (55)

6. Trance states resulting from attending to one's own amplified breath sounds (62) or the prolonged watching of a revolving drum, a metronome, stroboscope, etc.

D. *Decreased Alertness or Relaxation of Critical Faculties*

Grouped within this category are mental states which appear to occur mainly as a result of what might best be described as a 'passive state of mind,' in which active, goal-directed thinking is minimal.

Mystical, transcendental or revelatory states (e.g., *satori, samadhi,* nirvana, cosmic consciousness, at-oneness with nature) attained through passive meditation or occuring spontaneously during the relaxation of one's critical faculties (11, 54, 95) .

Daydreaming

Drowsiness

Brown study, or reverie

Free-associative state during psychoanalytic therapy

Mediumistic trance

Deliberately induced autohypnotic trance (e.g., among

Indian fakirs, mystics, Pythian priestesses, etc.)

Creative, illuminatory, and insightful states (54)

Profound aesthetic experiences

Music-trance, especially common while absorbed in relaxing, soothing lullabies (73)

Reading-trance (87), especially with poetry

Alterations in consciousness associated with profound cognitive and muscular relaxation, such as during floating on the water, sunbathing

Nostalgia

E. *Presence of Somatopsychological Factors*

Included under this heading are mental states resulting primarily from alterations in body chemistry or neurophysiology (32). These alterations may be deliberately induced or may result from conditions over which the individual has little or no control.

1. Hypoglycemia, either spontaneous or secondary to fasting; ascetics or priests may fast as an aid in inducing mystical or spirit-possession states

2. Drowsiness secondary to hyperglycemia (e.g., postprandial lethargy)

Dehydration (often partially responsible for the mental aberrations encountered on the desert or at sea) Hormonal disturbances, especially of the thyroid, adrenal medulla and cortex, may produce psychotic states Narcolepsy

Auras preceding migraine or epileptic seizures Hyperventilation states

Alterations in consciousness subsequent to sleep deprivation (37, 91, 93)

Toxic delirious states secondary to the abrupt withdrawal

from addicting drugs, such as barbiturates, alcohol, etc.

Toxic deleria caused by fever or the ingestion of toxic agents

Dreamy states and *déjà vu* phenomena caused by temporal lobe seizures

The administration of pharmacological agents

a) anesthetics: e.g., CO2, NO2, ether (23)

b) LSD and related compounds (18, 21)

c) narcotics, marihuana (18, 21)

d) sedatives: e.g., barbiturates, alcohol

e) stimulants: e.g., amphetamine, cocaine

f) others: e.g., Sernyl, Ditran, etc.

General Characteristics of ASC's

Although ASC's share many common features, there are certain general, molding influences which appear to account for many of the apparent differences in the outward manifestation of ASC's and in the subjective experience of the person affected by an ASC. Even though similar basic processes may operate in the production of certain ASC's (e.g., trance), such influences as cultural expectations (92), role-playing (83, 94), demand characteristics (74, 75), communication factors, transference feelings (42), personal motivation and expectations (mental set), and the specific procedure employed to induce the ASC, all work in concert to shape and mold a mental state with a unique flavor of its own.

To illustrate the effect of these influences, we might point out that "Buddhists, falling into trances, see Gautama in his various incarnations. Christian mystics, enveloped by ecstasy, see and hear the *dramatis personae* of the Nazarene epic. Pantheists, such as Tennyson, Swinburne, John Addington Symonds, or Walt Whitman, experience sensations of the oneness with nature" (64, p. 169). Possession states, involving possession by demons, animals, the Holy Spirit, or tribal spirits, mental states attained during various rites of passage, mystical states, and mediumistic and shamanistic trances — all take on the flavor of the predominant cultural values, beliefs, and expectations. We even find among the Balinese (5) and the Ashanti (22) that there are a number of different ritualized social forms of trance which are appropriate for different occasions.

Not only may the subjective content of ASC's differ, depending upon the cultural or social context, but the behavioral manifestations associated with these states may also differ. Each of the revivalistic religious cults, for example, appears to have its own unique features or trademarks which characterize religious conversion or possession by the Holy Spirit; these features comprise behavioral manifestations such as the holy jerks, holy laughter, holy rolling, holy barking, spinning, shaking, quaking, convulsions, whirling and howling, running and leaping, and shouting and crying..

Apparently, cultural or cult demands also influence the 'demonstrations of faith' that are often regarded as the highpoint of religious possession or conversion experiences. Snake-handling, swallowing 'salvation cocktails' of strychnine, fire-wa king, amputations, mutilations and scarring, and feats of great strength, daring, and endurance have been exhibited by various cults and tribes as different ways of attesting to the 'authenticity' of religious experience. The extremes to which these tests of faith can be carried might best be illustrated by the dervish practice of *doseh,* a ceremonial in which a mounted horse treads on the cataleptic bodies of the devotees (95).

Despite the apparent differences among ASC's, we find that there are a number of common denominators or features which allow us to to conceptualize ASC's as somewhat related phenomena. In previous research (48, 49, 57, 59), we were able to demonstrate the presence of many of these features in alterations of consciousness induced by hypnosis, lysergic acid diethylamide, and combinations of these variables. Similar features (described below) tend to be characteristic of most ASC's, to greater or lesser degree.

A. *Alterations in Thinking*

Subjective disturbances in concentration, attention, memory, and judgment represent common findings. Archaic modes of thought (primary process thought) predominate, and realitytesting seems impaired to varying degrees. The distinction between cause and effect becomes blurred and ambivalence may be pronounced, whereby incongruities or opposites can coexist without any logical or psychological conflict. Moreover, as Rapaport (78) has found from his work on amnesia, Korsakoff's psychosis, dreams, and hypnosis, there is a decrease in reflective awareness or, as Brenman (10) has commented, the person in trance becomes less able to 'be aware of being aware,' while at the same time he experiences an inward shift in the direction of attention.

B. *Disturbed Time Sense*

Sense of time and chronology become greatly altered. Subjective feelings of timelessness, time coming to a standstill, the acceleration or slowing of time, and so on, are common. While in the ASC, time may seem either of infinite or of infinitesimal duration.

C. *Loss of Control*

As a person enters or while he is in an ASC, he often experiences fears of losing his grip on reality and of losing his self-control. During the induction phase, he may actively try to resist experiencing the ASC (e.g., sleep, hypnosis, anesthesia), while in other instances he may actually welcome the relinquishing of his volition and giving in to the experience (e.g., narcotic drugs, alcohol, LSD, mystical states).

The experience of 'loss of control' is a complicated phenomenon. Relinquish ng conscious control may arouse feelings of impotency and helplessness, or, paradoxically, may represent the gaining of greater control and power through the loss of control. This latter experience may be found in hypnotized persons (27, 42) or in audiences who vicariously identify with the power and omnipotence which they attribute to a hypnotist or cemagogue. This is also the case in mystical, revelatory, or spirit-possession states, wherein the individual relinquishes conscious control in the hope of experiencing divine truths, clairvoyance, 'cosmic consciousness,' communion with spirits, or supernatural powers, or in the hope of serving as a temporary abode or mouthpiece for the gods.

D. *Change in Emotional Expression*

With the diminution of conscious control or inhibitions, there is often a marked change in emotional expression. There may appear sudden and unexpected displays of emotion, more primitive and intense than displays of emotion occurring during normal, waking consciousness. Emotional extremes, from ecstasy and orgiastic equivalents to profound fear and depression, commonly occur.

There is another pattern of emotional expression which may characterize these states. The individual may become detached and uninvolved, or may report intense feelings without having any emotional display color his report. The capacity for humor may also diminish.

E. *Body-Image Change*

A wide array of distortions in body-image frequently occur in ASC's. There is also a common propensity for individuals to experience a profound sense of depersonalization, a schism between body and mind, feelings of derealization, or a dissolution of boundaries between self and others, the world, or the universe.

When these subjective experiences arise from toxic or delirious states, from auras preceding seizures, or from the ingestion of certain drugs, etc., they are often regarded by the individual as strange and even frightening. However, when they appear in a mystical or religious setting, they may be interpreted as transcendental or mystical experiences of 'oneness,' 'expansion of consciousness,' 'oceanic feelings,' or 'oblivion'.

There are a'so some other common features which might be grouped under this heading. Not only may various parts of the body appear or feel shrunken, enlarged,

distorted, heavy, weightless, disconnected, strange, or funny, but spontaneous experiences of dizziness, blurring of vision, weakness, numbness, tingling, and ana gesia may also occur.

F. *Perceptual Distortions*

Common to most ASC's is the presence of perceptual aberrations, including hallucinations, pseudohal ucinations, increased visual imagery, subjectively-felt hyperacuteness of perceptions, and illusions of every variety. The content of these perceptual aberrations may be determined by cultural, group, individual, or neurophysiological factors, and may represent either wish-fulfillment fantasies, the expression of basic fears or conflicts, or simply phenomena of little dynamic import, such as hallucinations of light, color, and geometrical patterns or shapes. In some ASC's, such as those produced by psychedelic drugs, marihuana, or mystical contemplation, synesthesia may appear, whereby one form of sensory experience is translated into another form; for example, persons may report seeing or feeling sounds, or being able to taste what they see.

G. *Change in Meaning or Significance*

At this point, I should like to dwell somewhat on one of the most intriguing features of almost all ASC's, the understanding of which will help us to account for a number of seemingly unrelated phenomena. After observing and reading descriptions of a wxde variety of ASC's induced by different agents or maneuvers, I am impressed with the predilection of persons in these states to attach an increased meaning or significance to their subjective experiences, ideas, or perceptions. At times, it appears as though the person is undergoing an attenuated 'eureka' experience, during which feelings of profound insight, illumination, and truth frequently occur. In toxic or psychotic states, this increased sense of significance may manifest itself in the attributing of false significance to external cues, in ideas of reference, and in the numerous instances of 'psychotic insight'.

I should like to emphasize the fact that this sense of increased significance, which is primarily an emotional or affective experience, bears little re ationship to the actual truth of the belief to which it is attached. In other words, conviction in the truth or significance of a belief must be distinguished from the truth of the belief itself (if that truth can, in fact, ever be determined). Although I have previously discussed this issue at some length (54), it seems important enough to warrant further comment.

To illustrate the ridiculousness of some of the 'insights' attained during ASC's, I should like to cite an experience I had when taking LSD for experimental purposes. Sometime during the height of the reaction, I experienced an intense desire to urinate. Standing by the urinal, I noticed a sign above it which read, 'Please Flush After Using!' As I weighed these words in my mind, I suddenly realized their profound meaning. Thrilled by this startling revelation, I rushed back to my colleague to share this universal truth with him. Unfortunately, being a mere mortal, he could not appreciate the world-shaking import of my communication and responded by laughing!

William James (34, p. 284) describes subjective experiences associated with other alterations of consciousness. "One of the charms of drunkenness," he writes, "unques-

tionably lies in the deepening sense of reality and truth which is gained therein. In whatever light things may then appear to us, they seem more utterly what they are, more 'utterly utter' than when we are sober." In his *Varieties of Religious Experience,* he adds:

> Nitrous oxide and ether, especially nitrous oxide, when sufficiently diluted with air, stimulate the mystical consciousness in an extraordinary degree. Depth upon depth of truth seems revealed to the inhaler. This truth fades out, however, or escapes, at a moment of coming to; and if the words remain over in which it seemed to clothe itself, they prove to be the veriest nonsense. Nevertheless, the sense of a profound meaning having been there persists; and I know more than one person who is persuaded that in the nitrous oxide trance we have a genuine metaphysical revelation (35, p. 378).

Although this feeling of increased significance and import may be encountered during dreaming, hypnosis, aesthetic experiences, creative states, and auras preceding seizures, it also -epresents one of the most important features of the mystical or religious consciousness, whether that state of consciousness is induced by

'natural' or by 'artificial' means (i.e., peyote, LSD, marihuana, various anesthetics). I would surmise that this 'raw' sense of significance, which lends import and conviction to the 'revelations' attained during mystical consciousness or religious possession states, has been a major factor in the stabilization of many religions, sects, and cults. Addressing himself to this matter, Leuba (cited by 35, p. 242) writes that:

> The ground of the specific assurance in religious dogmas is then an affective experience. The objects of faith may even be preposterous; the affective stream will float them along, and invest them with unshakable certitude. The more startling the affective experience, the less explicable it seems, the easier it is to make it the carrier of unsubstantiated notions.

H. *Sense of the Ineffable*

Most of tent, because of the uniqueness of the subjective experience associated with certain ASC's (e.g., transcendental, aesthetic, creative, psychotic, and mystical states), persons claim a certain ineptness or inability to communicate the nature or essence of the experience to someone who has not undergone a similar experience. Contributing to this sense of the ineffable is the tendency of persons to develop varying degrees of amnesia with respect to the experiences hey have during profound alterations of consciousness such as hypnotic trance, somnambulistic trance, possession fits, dreaming, mystical experiences, delirious states, drug intoxications, auras, orgiastic and ecstatic states, and the like; though amnesia is by no means always the case, as witnessed by the lucid memory which follows the psychedelic experience, marihuana-smoking, or certain revelatory or illuminatory states.

I. *Feelings of Rejuvenation*

Although the characteristic of 'rejuvenation' has only limited application to the vast panoply of ASC's, I have included this characteristic as a common denominator since it does appear in a sufficient number of these states to warrant attention. Thus, on emerging from certain profound alterations of consciousness (e.g., psychedelic experiences; abreactive states secondary to the administration of carbon dioxide, methedrine, ether, or amytal; hypnosis; religious conversion; transcendental and mystical states;

insulin-coma therapy; spirit-possession fits; primitive puberty rites; and even, on some occasions, deep sleep), many persons claim to experience a sense of renewed hope, rejuvenation, renaissance, or rebirth (7, ☒ 1, 15, 21, 33, 35, 43, 44, 59, 65, 76, 82).

J. *Hypersuggestibility*

Employing a broad view, I shall regard as manifestations of hypersuggestibility in ASC's not only the numerous instances of 'primary' and 'secondary' suggestibility, but also the increased susceptibility and prope isicy of persons to accept and/or automatically to respond uncritically to specific statements (i.e., commands or instructions of a leader, shaman, demagogue, hypnotist) or to non-specific cues (i.e., cultural or group expectations for certain types of behavior or subjective feelings). Hypersuggestibility refers also to the increased tendency of a person to misperceive or to misinterpret various stimuli or situations based on either his inner fears or his wishes.

It is becoming increasingly apparent that the phenomenon of suggestibility associated with ASC's can best be understood by analysis of the subjective state itself. Recently, theoreticians seem to have become much more aware of the importance of examining the subjective state as part of their endeavor to account for many of the phenomena observed in hypnotized persons. Orne, for example, stated that "an important attribute of hypnosis is a potentiality for the subject to experience as subjectively real suggested alterations in his environment that do not conform with reality" (74, p. 237). Sutcliffe adds that "the distinguishing feature of this state is the hypnotized subject's emotional conviction that the world is as suggested by the hypnotist, rather than a pseudoperception of the suggested world" (89, p. 200).

I think that a better understanding of hypersuggestibility can be gained through an analysis of some of the subjective features associated with ASC's in general. With a reduction in the effective range of a person's critical faculties there is an attendant decrease in his capacity for reality-testing, i.e., in his ability to distinguish between subjective and objective reality. This, in turn, tends to create the compensatory need to bolster such failing faculties by seeking out certain props, support, or guidance in an effort to relieve some of the anxiety usually associated with a loss of control. In his attempt to compensate for his failing critical faculties, the person comes to rely more heavily on the suggestions of the hypnotist, shaman, demagogue, interrogator, religious healer, preacher, or doctor, all of whom represent omnipotent, authoritative figures. With the 'dissolution of self boundaries,' which represents another important feature of ASC's, there is a so the tendency for the person to identify vicariously with

the authoritarian figure, whose wishes and commands are consequently accepted as the person's own. Contradictions, doubt, inconsistencies, and inhibitions tend to diminish (all characteristics of 'primary process' thinking), and the suggestions of the person endowed with authority tend to be accepted as substitutes for concrete reality. Finally, these suggestions become imbued with even more importance and urgency owing to the increased significance and meaning attributed both to internal and external stimuli during alterations in consciousness.

With all these actors operating, there occurs a monomotivational or 'supramotivational' state in which the person strives to realize, in terms of concrete behavior, the thoughts or ideas which he experiences as subjective reality. This subjective reality may be determined by a number of influences working individually or in concert, such as the expectations of the authority figure, the group, culture, or even by the 'silent inner voice' (e.g., during autohypnotic states, prayer, a uditory hallucinations, attendance of guiding spirits) expressing the person's own wishes or fears.

When a person lapses into certain other ASC's, such as panic, acute psychosis, toxic delirium, etc., where external direction or structure is ambiguous and ill-defined, the person's internal mental productions tend to become the major guide for the way in which he perceives reality and therefore play a large role in determining his behavior. In these instances, the subject is much more susceptible to the dictates of his emotions, and the fantasies and thoughts associated with them, than to directions given by other people.

Interrelationship Among ASC's

With respect to the relationship obvious that some spates are more they are to others. For example, drowsiness, reverie, hypnagogic and ypnopompic states, somnambulism, sedated drug states, and narcolepsy seem much more related to a sleep-wakefulness continuum than do ecstatic or mystical trances, psychedelic experiences, hyperalert trances, or vigilance states. Unfortunately, I know of no appropriate model that accounts for the relationship among all ASC's.

Nevertheless, there is evidence which suggests that the same basic process is operative in *a* number of these conditions. William Sargant (82), for example, views religious conversion, spiritpossession, brainwashing, forceful indoctrination, and certain types of psychotherapy as resulting from a physiological transmarginal inhibition'. Although the manifested forms of these states may be different, Sargant feels that such states are induced by similar processes and show the same basic clinical features.

In previous research, Dr. Lyle and I (60) were able to demonstrate the close relationship between certain seemingly unrelated ASC's. Employing a tension induction technique to elicit a 'hyperalert' or 'hyperkinetic' form of trance (which might serve as an artificial paradigm for ASC's elicited during brainwashing, revival istic meetings, tribal ceremonies, mass hysteria, verbal badgering, or other hyperkinetic procedures),

we were able, by means of simple suggestion, to abruptly transform this type of trance into a relaxed, hypokinetic, sleep-like hypnotic trance (which might serve as an artificial paradigm for ASC's elicited during sleep, reverie, daydreaming, passive meditation, sensory deprivation, and the like), and vice versa.

Concerning the relationship of certain psychologically induced ASC's to those induced by physiological or pharmacological means, the connection appears less clear and the clinical and experimental evidence more scanty. The psychedelic experiences attained through peyote, LSD, psilocybin, or mescaline tend to resemble the subjective experiences attained through marihuana (18, 21, 66), certains anesthetics (4), or opium (21), all of which may closely resemble the subjective experiences gained in the hypnotic trance (28), mystical states (76), creative states (54), or during acute psychotic or toxic episodes.

It should also be mentioned that certain ASC's may act either antagonistically or synergistically with one another. Various drugs, 84

for example, may be comoined to produce either desirable or undesirable ASC's (58): barbiturates may be used to facilitate sleep; hypnosis or LSD used to facilitate mystical experiences; alcohol used to facilitate spirit-possession; and so on. Not only can ASC's be emp oyed to facilitate the emergence of other ASC's, but they can also be used to eliminate or control, structure and direct, other ASC's. For example, hypnosis can be used to alleviate hysterical amnesia, to terminate the subjective effects associated with alcoholic (77) and morphine intoxication (61), or to control, structure, and mold the LSD experience (48, 50).

Functions of ASC's

Now that we have considered certain characteristics associated with ASC's, we might raise the question as to whether or not ASC's serve any useful biological, psychological, or social functions. It is my thesis that the very presence and prevalence of these states (84) attest to their importance in man's everyday life. I find it difficult to accept, for example, the notion that man's ability to apse into trance has been evolved for no other purpose than to make possible his being hypnotized on stage, or in a clinical or laboratory setting. Moreover, the widespread occurrence and use of mystical and possession states, or of aesthetic and creative experiences, indicates that these ASC's satisfy needs for both man and society. Although my thesis may prove teleologica I feel that this approach will shed some further light on the nature and function of these states.

My viewpoint, then, is that ASC's may be regarded (to use Sherrington's terminology) as 'final common pathways' for many different forms of human expression and experience, both adaptive and maladaptive. In some instances, the psychological regression found in ASC's will prove to be atavistic and harmful to the individual or to society, while in other instances, the regression will be 'in the service of the ego' (40)

and will therefore enable man to transcend the bounds of logic and formality, or to express repressed needs and desires in a socially sanctioned and constructive way.

Before we consider the adaptive and maladaptive aspects of certain ASC's, some definitions are in order. 'Adaptive ASC's' will refer to altered mental states which enable the individual to acquire new knowledge or experience, to express psychic tensions or relieve conflict without danger to himself or others, and to function more adequately and constructively in society. 'Maladaptive ASC's,' then, may be regarded as altered mental states which serve no constructive purpose and which can, on occasion, endanger the individual or hamper his functioning in society. In many instances, a value judgment will be necessary in order to label the expressions of certain ASC's as either adaptive or maladaptive.

A. *Maladaptive Expressions*

The maladaptive expressions or uses of ASC's are numerous and manifold. The emergence of these ASC's may represent: (a) attempts at resolution of emotional conflict, e.g., fugues, amnesia, traumatic neuroses, depersonalization and dissociation; (b) defensive functions in certain threatening situations conducive to the arousal of anxiety, e.g., lapsing into hypnoidal states during psychotherapy (19); (c) a breakthrough of forbidden impulses, e.g., acute psychotic and panic reactions; (d) escape from responsibilities and inner tensions, e.g., narcotics, marihuana, alcohol, (e) the symbolic acting-out of unconscious conflicts, e.g., demoniacal possession, bewitchment (24, 25, 36, 56, 70); (f) the manifestation of self-destructive tendencies, e.g., rage reactions on the the battlefield, instances of voodoo death (14); and (g) the manifestation of organic lesions or neurophysiological disturbances, e.g., auras, toxic conditions.

Other maladaptive aspects of ASC's can be cited. In certain instances, persons may inadvertently lapse into a trance state while on the higiway or while flying, hereby increasing the possibility of accidents (6, 71). Serious consequences, in terms of a lapse of security precautions, may arise when a person falls into trance during sentry duty or while attending to a radar screen. Furthermore, a potentially dangerous use of ASC's involves their calculated production by demagogues, hate-mo igers, and interrogators and inquisitors, in their efforts to elicit confessions, to change attitudes, and to control behavior.

B. *Adaptive Expressions*

In the *Phaedras* (20), Socrates remarks, "Our greatest blessings come to us by way of madness." He then proceeds to distinguish between four types of divine madness, i.e., between four types of ASC: these are (a) prophetic madness, whose patron is Apollo; (b) telestic or ritual madness, whose patron is Dionysus; (c) poetic madness, inspired by the Muses; and (d) erotic madness, inspired by Aphrodite and Eros. Although Socrates' classification is quite ingenious, we shall have to settle for a less colorful ore at present.

1. *Healing.* Throughout history, the production of ASC's has played a major role in various healing arts and practices. The induction of these states has been employed for almost every conceivable aspect of psychological therapy. Thus, shamans may lapse

into trance or possession states in order to determine the etiology of their patients' ailments, or to learn of specific remedies or healing practices (72). Moreover, the shaman, hungan, medicine man, priest, preacher, physician, or psychiatrist may regard the production of an ASC in the patient as a crucial prerequisite for healing and an essential prelude to treatment. There are countless instances of healing practices designed to take advantage of the heightened suggestibility, the tendency to attribute increased meaning to ideas, the propensity for emotional catharsis, and the feelings of rejuvenation associated with ASC's. The early Egyptian and Greek practices of 'incubation' in sleep temples, the faith cures at Lourdes and other religious shrines, healing through prayer and meditation, cures by the 'healing touch,' the laying on of hands, encounters with religious relics, spiritual healing, spirit-possession cures, exorcism, mesmeric or magnetic treatment, and modern day hypnotherapy — all are obvious instances of the role of ASC's in treatment (53).

Pharmacologically Induced ASC's have also played a major role in the healing arts. Abreactive or cathartic techniques, employing peyote, ether, CO2, amytal, methedrine, and LSD, have all had wide use in psychiatry (23, 82). Kubie and Margolin (41, 63) have also commented on the therapeutic value of certain drugs which tend to induce temporary dissociation and to relieve repression.

Perhaps unrelated to the specific effects of ASC's in treatment are the non-specific effects of certain other alterations in consciousness which aid in maintaining psychic equilibrium and mental health. For example, sleep (traditionally regarded as The Great Healer) and dreaming seem to serve an important biological and psychological function (88). The ASC associated with sexual orgasm might be considered as another beneficial mental alteration which not only has biological survival value as a positive reinforcement for the sexual drive, but also serves as an outlet for numerous human desires and frustrations.

2. *Avenues to New Knowledge or Experience.* Man has often sought to induce ASC's in an effort to gain new knowledge, inspiration, or new experience. Intense prayer, passive meditation, revelatory and prophetic states, mystical and transcendental experiences, religious conversion, and divination states have served man by opening new realms or religious experience, reaffirming moral values, resolving emotional conflicts, and often by enabling him to cope better with the human predicament and the world about him. It is also interesting to note that among many primitive groups, spirit-possession is believed to impart a superhuman knowledge which could not possibly be gained during waking consciousness; such paranormal faculties as superlative wisdom, the 'gift of tongues,' and clairvoyance are supposedly demonstrated during the possession fit (22).

ASC's appear to enrich man's experience in many other areas. For example, the intense aesthetic experience of being absorbed in some majestic scene, in a work of art, or in music may broaden man's subjective experiences and may serve as a source of creative inspiration. 'There are also numerous instances of sudden illumination,

creative insight, and problem-solving that have occurred as an individual lapsed into such ASC's as trance, drowsiness, sleep, passive meditation, or drug intoxication (39).

3. *Social Function.* ASC's occ ing in a group setting seem to serve many individual and social needs. Although a brief discussion cannot do justice to the wide variety of functions which ASC's serve for various cultures, we can at least mention a few. Aside from their important functions as healing and prophetic media among many primitive peoples, ASC's serve certain less obvious and perhaps even more vital purposes.

If we choose to employ spirit-possession as a paradigm to gauge the potential value of ASC's, we find that its social import and ramifications are considerable. Generally, such a state is more highly valued among 'primitive' people or among those who are economically deprived and are leading a frustrated, marginal existence. Among these groups of people, the implications of spirit-possession affect almost every facet of their lives.

From the viewpoint of the individual, possession by one of the tribal or local deities or by the Holy Spirit during a religious ceremony provides a means of attaining high status through fulfilling a cult role, temporary freedom of responsibility for actions and pronouncements, or the opportunity to act out, in a socially sanctioned way, aggressive and sexual conflicts or desires (69). Tensions and fears are dissipated and a new sense of spiritual security and confidence may supplant the despair and hopelessness of a marginal existence. Writing of his experiences with the Babalu cult of eastern Cuba and the snake-handling cult of Durham, N.C., Davidson states that "for a short time the painfully isolated individual merges himself into the ecstatic group and achieves forgetfulness of his limitations and the boundary lines of self." The struggle for scarce goods and prestige is offset, within the context of cult activity, by the emphasis on a value which can be achieved by all; namely, salvation. Temporarily, at least, religious prestige supplants social prestige (16).

From society's standpoint, the needs of the tribe or group are met through its vicarious identification with the entranced person, who not only derives individual satisfaction from divine possession but who also acts out certain ritualized group conflicts and aspirations, such as the theme of death and resurrection, cultural taboos, and so on (5, 16, 17, 22, 44, 79). Moreover, the dramatic behavioral manifestations of spirit-possession serve to convince the participants of the continued personal interest of their gods, to reaffirm their local beliefs, to allow them to exert some control over the unknown, to enhance group cohesion and identification, and to endow the utterances of the entranced person, shaman, or priest with an importance they might otherwise not have if spoken in an ordinary setting. In general, the existence of such practices represents an excellent example of how society creates modes of reducing frustration, stress, and loneliness through group action.

Although I have no intention of surveying the multitude of social functions which ASC's serve, I should also like to make some mention of their possible biological survival value. In a group setting, whether it be political, religious, or social, ti e induction of ASC's tends to lessen the differentation between self and others and therefore to

enable individuals to derive all the survival benefits and strength of unison which come from a greater social cohesiveness or herding tendency. There is the propensity, then, for people to lapse into a trance-like state and to reaffirm their group-identity whenever their needs and desires coincide with those of the speaker, p eacher, leader, or demagogue. Naturally, this strength derived from group-identity can be used in a destructive manner (e.g., crusades, mass hysteria, lynch mobs) or in a constructive way (e.g., tribal hunting expeditions).

In conclusion, then, it appears that ASC's play a very significant role in man's experience and behavior. It is also apparent that these states may serve as adaptive or maladaptive outlets for the expression of a multitude of man's passions, needs, and desires. Moreover, there is little question that we have hardly scratched the surface in our efforts to understand fully the facets and functions of ASC's. As a final note, I should like to quote the very pertinent remarks of Williams James (35, pp. 378–79):

> Our normal waking consciousness ... is but one special type of consciousness, whilst all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different. We may go through life without suspecting their existence; but apply the requisite stimulus, and at a touch they are all there in all their completeness, definite types of mentality which probably somewhere have their field of application and adaptation. No account of the universe in its totality can be final which leaves these other forms of consciousness quite disregarded. How to regard them is the question — for they are so discontinuous with ordinary consciousness. Yet they may determine attitudes though they cannot furnish formulas, and open a region though they fail to give a map. At any rate, they forbid a premature closing of our accounts with reality.

Summary

Despite numerous clinical and research reports on certain altered states of consciousness, there has been little attempt to conceptualize the relationship among these states and the conditions necessary for their emergence. To this end, the author has tried to integrate and discuss pertinent findings from many diverse areas in an effort to gain a better understanding of these states and the functions they serve for man and society.

As one views the many altered states of consciousness experienced by man, it soon becomes apparent that there are a number of essential conditions which contribute to their emergence. Moreover, although the outward manifestations and the subjective experiences associated with various alterations in consciousness may differ, there are a number of basic features which most of these states have in common. From a functional viewpoint, it also becomes clear that many altered states of consciousness serve as 'final common pathways' for many different forms of human expression, both maladaptive and adaptive.

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L'examen Au Rorschach Des Vaudouisants Haïtiens

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Le vaudou fait partie de la définition même du peuple haïtien. Malheureusement, ce culte afro-antil lais est mieux connu grâce surtout aux efforts de ses détracteurs. Une fois décapé de son aspect ésotérique et terrifiant, il devient un objet de science. De tous les phénomènes spectaculaires associés à la pratique du culte vaudou, la crise de possession ou 'crise de loâ' a toujours constitué un élément de mystère et une redoutable question-problème. Au tableau clinique de la crise voisinent des troubles mentaux et nerveux, des perturbations psychophysiologiques et des phénomènes para-psychologiques si troublants qu'on a dit de ce comportement étrange qu'il constituait une 'énigme psychologique'.

C'est dans ce vaste répertoire de troubles neuro-psychiatriques pour certains et socio-culturels pour d'aut es que médecins, psychiatres, sociologues, anthropologues et exorcistes ont puisé pour ouvrir les débats sur l'existence d'une véritable psychopathologie du vaudou. Chacun, selon sa spécialité ou selon son optique particulière, en a retenu certains éléments de diagnostic différentiel pour appuyer sa thèse personnelle.

Expliquer la crise de possession dans le vaudou revient certes à comprendre une dimension fondamentale de la psychologie du Noir. Mais si cette question a toujours paru insoluble, c'est sans doute parce qu'elle a été mal posée. En nous appliquant à mieux la poser, nous avons tenté d'aboutir à un ordre de réalité si extraordinairement simple que la 'criseuse de loâ' pourrait tomber toute sa vie sans jamais réussir à se faire comprendre.

De fait, aucune étude psychologique systématique, objective, rigoureusement scientifique n'a jamais été faite de la crise de possession dans le vaudou. Aussi le problème de la normalité ou non de ce phénomène demeurait-il encore sans solution, faute d'une évidence psychopathologique expérimentalement démontrée. Le but de cette recherche a été de combler cette lacune en soumettant les variables de la crise à une vérification expérimentale.

Au seuil de cette étude sur la transe sommes posé les questions suivantes :

Existe-t-il un profil caractéristique de la personnalité du 'criseur de loâ' ?

2) Ce profil correspond-il à un tableau clinique:

1. de nature *normale,* c'est-à-dire en conformité exclusive avec des valeur religieuses et culturelles collectives, socialement acceptées et universellement distribuées à l'intérieur d'une communa ité ethnique homogène.

2. de nature *caractérielle* (selon une réceptivité particulière à un conditionnement hypnotique, ou selon des prédispositions héréditaires propres).

3. s'agirait-il, au contraire, d'une condition *pathologique* bien définie? Auquel cas sommes-nous en présence d'une pathologie du type organique, névrotique ou psychotique ?

Comme selon toute apparence, la crise de possession revêt l'allure d'un phénomène complexe et surdéterminé, il nous semble que pour bien appréhender ce 'quelque chose' de mystérieux dont la présence ou l'absence dans la personnalité serait responsable de la crise et différencierait le 'criseur' du 'non-criseur', une approche convergente et multidisciplinaire de la transe vaudouesque est méthodologiquement indispensable à cette première recherche expérimentale sur ce phénomène. Toute ois, si ce procédé de réduction expérimentale par élimination progressive des variables en cause semble être fondamental, il ne constitue qu'une étape initiale dans notre étude.

Ici le problème le plus important à notre sens n'est pas tant de diagnostiquer la crise que d'explorer l'univers mental du 'criseur'. Il est relativement commode de catégoriser un phénomène lorsqu'on vise à des fins de simple classification. Mais, il nous paraît plus fascinant et plus capital pour cette recherche de transcender tout schématisme noso ogique ou caractériel pour tenter d'accéder à la réalité intérieure du 'criseur'.

Que représente la crise aux yeux du 'criseur' et de son milieu? Quelle fonction véritable sert-elle au sein de la personnalité? Quel rôle positif ou négatif joue-t-elle dans le processus d'adaptation? Quelles sont les variables dont la synchronisation par un mécanisme régulateur en explique la genèse, et l'évolution au sein du psychisme? A quelles conditions est-elle susceptible d'être expérimenta lement provoquée? Dans quelles limites favorise-t-elle l'établissement d'une maladie mentale ou nerveuse, ou joue-t-elle au contraire comme mécanisme inhibiteur d'une pathologie latente? A quel prix est-elle accessible à tous ou réservée à des initiés, en tant que simples exercice d'ascèse mentale? Ou n'est-elle enfin qu'une dangereuse culture du morbide comportant les risques de traces permanentes dans la structure de l'appareil psychique ?

La stratégie générale de cette recherche a été p anifiée de telle sorte qu'elle nous permette au moins d'amorcer une réponse à ces questions fondamentales au sujet de la 'crise de loâ' et de tenter par ce biais une percée dans le domaine si profondément obscur de la parapsychologie.

Quarante-quatre (44) sujets de sexe féminin répartis en deux groupes expérimentaux (N: 25) et un groupe contrôle (N: 19) ont été examinés à cet effet. Le premier groupe expérimental (crise rituelle) comprenait des catholiques illettrés qui tombent en transe durant les cérémonies vaudo uesques. Le deuxième groupe expérimental (crise non-ritueile) également composé de catholiques illettrés incluait des sympathisants du vaudou qui expérimentent la crise en dehors de toute atmosphère liturgique. Chaque sujet fut soumis d'une part à des tests de contrôle (médical, neurologique,

laboratoire), d'autre part à des examens psychologiques (Raven, Goldstein-Scheerer, Sacks, Rorschach, autobiographie, observation du comportement, épreuves objectives d'examen mental). L'expérimentation fut poursuivie de façon intermittente de 1957 à 1963 au rythme de huit séances de trois heures chacune par sujet. Elle fut conduite dans le dialecte créole et eut lieu en dehors des périodes de transe vaudouesque.

Nous ne nous étendrons pas outre mesure sur les menus détails de la procédure et des conditions expérimentales. Ceux qui s'y intéressent peuvent se référer à notre étude sur "crise de possession dans le vaudou haïtien" (Douyon, 1965). Qu'on nous permette cependant de rappeler dans le cadre de cet exposé qu'avant notre arrivée en Haïti, la psychologie scientifique confondue avec l'enseignement académique des sciences philosophiques, était inconnue dans le milieu sous son aspect appliqué. En conséquence, l'introduction des techniques psychologiques dans le pays précéda de peu la conduite de notre recherche sur la crise de possession. Comme normes, nous ne disposions donc que de quelques résultats de tests d'inte ligence et de personnalité appliqués aux enfants et aux adultes au cours de notre travail aux centres de consultation psychologique et psychiatrique du gouvernement et à notre clinique privée. Cet échantillon comprenait su tout des patients lettrés et appartenant à une classe socio-économique relativement aisée. Ajoutons qu'une petite étude rapide conduite par une sociologue américaine en transit (Bourguignon, 1955), sur les réponses populaires au Rorschach parmi quelques haïtiens était aussi parvenue à notre connaissance, ainsi que certaines études comparatives sur c e petits groupes ethniques sous-développés en Amérique et en Asie par le moyen de techniques projectives. (Abel, 1948; Goyer, 1957; Hallowell, 1945; Henry et *al.,* 1955; Klopfer, 1954; Mathieu-Fortin, 1949; Pidoux, 1955; Riesman *et al.,* 1958; Riez et Schwartz et *al.,* 1950; Schwartz et *al.,* 1951).

Nous étions au courant de la controverse entre psychologues et anthropologues au sujet de 1' 'applicabilité' des techniques projectives aux civilisations différentes des leurs. Henry (1955) prétend par exemple qu'à durée égale on peut obtenir d'aussi bonnés informations sur la personnalité d'une culture qu'avec un instrument tel que le Rorschach qui pose un mur entre l'observateur et les autres. Nadel (cf. Sherman, ed., 1960) pense que les techniques projectives placent l'individu dans un contexte trop éloigné de la vie, devant un matériel ambigu et nouveau.

En dépit des critiques relatives à la trop grande généralité des techniques projectives, à la difficulté de prouver leur validité statistique, aux lacunes de leur typologie, à leur aspect trop artistique, à leur sophistication technique élaborée, à leur défaut de généralisation en terme de classe sociale, et à leur schème de référence d'allure trop psychanalytique, il reste cependant que nulle autre méthode d'observation psychologique n'est assez fiable, assez valide, assez sensible, assez objective et suffisamment indépendante de ces mêmes critiques pour suppléer avantageusement des tests comme le *Rorschach* ou le *T.A.T.* (cf. Henry *et al.,* .955; Klopfer, 1954, Vol. 2; Sherman, ed., 1960; Riesman *et al.,* 1958).

Malheureusement, nous n'avions à notre disposition aucune observation systématique des analphabètes haïtiens, en particulier ceux de l'arrière-pays. (Douyon, 1955,

1963). Nous ignorions dans quelle mesure nos techniques psychologiques leur étaient applicables, faute de schèmes de référence pouvant permettre d'interpréter les résultats d'un examen psychologique dans ce contexte culturel nouveau. Or, la connaissance des réactions psychologiques de cette population aux tests mentaux nous paraissait préjudicielle, puisque c'est essentiellement parmi ses ressortissants que se recrute la masse des 'criseurs de loâ,' ou des sujets éventuels de notre recherche. Plus précisément, nous ignorions le profil psychologique normal d'un paysan haïtien moyen à une épreuve d'intelligence ou de personnalité, et le type de test le plus convenable pour arriver à apprécier ce profil.

Il nous fallait donc commencer par mettre en question la valeur de nos moyens traditionnels d'investigation, 'adéquacité de nos instruments de connaissance pour appréhender cette réalité nouvelle et complexe qui nous était proposée. Il nous a paru nécessaire de tester nos tests d'abord sur un échantillon miniature de paysans normaux en vue d'une mise au point finale de notre instrumentation pour la recherche. Six sujets adultes âgés de vingt à cinquante ans, des deux sexes, illettrés, catholiques, d'origine paysanne, et présumés normaux au point de vue physique et mental furent choisis. Le groupe était composé de telle sorte qu'il devait réunir les mêmes caractéristiques essentielles et l'échantillon définiti .

Ces sujets furent soumis aux épreuves suivantes: (a) Rorschach; (b) test thématique d'apperception (T-T.A.T. ou modification de Thompson pour les Noirs); (c) Bender Gestalt; (d)

Dessin (D.A.P.); (e) *Bêta;* (f) matrices progressives colorées de Raven; (g) Goldstein-Scheerer; (h) Phrases à compléter de Sacks. Tous ces tests avaient été sélectionnés pour deux raisons: d'abord à cause de leur valeur psychodiagnostique reconnue, puis parce que les sujets à examiner n'ayant jamais fréquenté l'école devaient en principe être soumis à un matériel concret et essentiellement non-verbal, exception faite pour le test de phrases à compléter qui a été administré oralement dans le but d'éliminer l'usage de l'écri ure forcément inconnue de ces sujets.

C'est sur la base de cette pré-expérimenttaion que la batterie expérimentale a été sélectionnée afin de rendre compte de la structure de personnalité des vaudouisants haïtiens. Si la 'crise de loâ' dans le vaudou représente une conduite essentiellement pathologique, on pourrait s'attendre à ce que le test Rorschach en particulier, actuellement considéré comme l'instrument de choix pour le diagnostic différentiel, apporte la preuve irréfutable de cette pathologie.

Avant d'entrer dans les détails techniques de l'interprétation et pour donner une idée plus concrète du matériel original sur lequel repose cette interprétation, nous allons présenter deux exemples typiques des protocoles recueillis pour le groupe expérimental, et qui sont précédés de quelques notes biographiques :

Observation I

Odette est la benjamine d'une famille de cinq "quatre ont été mangés par le démon". Elle est en verte contre un père ivrogne et querelleur et une jette du piment à l'oeil et l'assujettit à la branche d'un arbre pour la fouetter. "Son sang, dit-elle, est si chaud" qu'elle se demande parfois si elle est un diable ou une personne. On lui fait une réputation d'assassin depuis qu'elle a avalé le bout d'oreille d'un adversaire, a brisé le poignet de son concubin et a failli tuer sa demi-soeur d'un coup de pierre à la nuque. "C'est plus fort que moi, confesse-t-elle, dès que je lutte avec quelqu'un, je dois 'mettre son sang dehors' pour être satisfaite de moi-même."

Cette agressivité dont les nombreuses cicatrices sur le corps portent témoignage lui a déjà valu trois séjours en prison. Comme sa mère l'a récemment menacée de la aire emprisonner de nou-

veau, elle a quitté le foyer maternel. Elle a été recueillie par une amie également possédée et qu'elle considère comme une 'soeur mystique' depuis leur initiation commune aux mystères du *canzo* chez *Ti-Mo* leur second père.

Odette brosse de son évolution personnelle un tableau extrêmement chargé. Elle est 'née étouffée' par le cordon ombilical qui lui serrait le cou. Elle a tété sa mère durant deux ans et six

mois et a marché tard. Elle n'a rien appris à l'école, parce qu'elle eut la malchance de tomber sur un professeur trop intéressé à lui 'faire les yeux doux'. Elle a partagé la chambre de ses parents durant les trois premières années de sa vie. Son principal jeu autoérotique consistait à se remplir de terre le vagin.

Malgré les mauvais traitements de ses parents qui l'obligeaient souvent à se réfugier dans les bois, elle s'est toujours perçue comme la préférée de son père et de sa mère. Celle-ci en particulier abusait d'elle en l'obligeant à courir sans répit vers la source lointaine pour approvisionner la famille en eau potable. Au début elle pleurait jusqu'au jour où son *loâ* décida d'intervenir pour protéger son 'cheval'.

Elle prit assez jeune l'habitude de fréquenter en fin de semaine les petits bals sous la tonnelle et les boîtes de nuit sur la route de Delmas, en particulier à l'occasion de la visite hebdomadaire des marins étrangers. Un américain s'éprit d'elle éperdument et voulut l'emmener aux Etats-Unis mais elle se méfie des blancs qui ont l'habitude de cacher chez eux des baccas. Plus tard, elle s'aperçut qu'il n'y avait pas que les hommes a être attirés par sa 'grosseur'. Les femmes aussi lui font des avances. Bien sûr elle réprouve, dit-elle, ces "femmes-à-femmes", y compris sa propre compagne 'Ti-commère' qui lui caresse le gros orteil durant son sommeil.

Bien qu'Odette ait affirmé son désintérêt actuel pour les hommes qui abusent d'elle en demandant d'abord 'un petit goûter' et se dépêchent ensuite de l'abandonner, elle me proposa brusquement sur le chemin du retour ce prendre un raccourci par la forêt avec ma voiture. "Docteur, me souffla-t-elle, d'un air subitement attendri, nous sommes au trente décembre, aujourd'hui. Eh! bien, ce seront vos étrennes..."

Voici la projection de cette personnalité au test Rorschach :

Odette, S. (groupe experimental)
TT = 4h. 45 — 5h.

Test	Enquête
I	I
1". T = 53"	
Un arbre... un arbre séché les branches tombent par terre (W)	Si la racine est sèche, l'arbre tombera, si on vient avec une machette, on peut le couper — je ne peux pas le décrire, car ce n'est pas moi qui l'ai planté je l'ai trouvé là... Il est sec qui, à cause de la petite couleur pourrie, les branches "débranchent" pour tomber
II	II
14". T = 52"	
La tête d'un cochon, la tête d'une bête, c'est le sang qui saigne dans la tête de la bête, la bête verse du sang, c'est tout (D — W)	Voici sa tête, ses pieds, sa bouche, on Fa piqué ici (en haut) et il a versé son sang là (en bas); voici son corps (partie noire); ce sont deux cochons qui sont là, je voix deux têtes, etc.
III	III
7". T = 44"	
Cà ressemble à quelqu'un qui est blessé, voici son sang qui est versé (W coupé)	Je ne sais si c'est une fille ou un garçon, c'est la couleur du sang; sûrement il a reçu un coup de poignard et il a versé son sang
IV	IV
10". T — 31" (carte en position renversée)	
C'est un macaque — non ce n'est pas un macaque, c'est une bête qui coupe les gens dans l'eau (W)	Elle prend la personne avec son pied et elle la lance sur son arme qu'elle porte sur son dos; (la cri-seuse relate alors l'histoire de quelqu'un qui a été happé par un monstre marin). Elle a quatre pieds, elle peut couper n'importe qui dans la mer, ce n'est pas un requin
V	V
10". T = 32"	
C'est une bête, comment s'appelle-t-elle encore? Elle n'habite pas dans la mer, mais dans l'étang (W)	Voici ses pieds, ses cuisses, elle habite dans l'eau, dans l'étang
VI	VI
16". T = 32"	
Une église (W)	Je sais voir les églises comme ça — je ne puis rien dire là-dessus — c'est une église qu'on bâtit. On a fait son corps et sa tête, elle n'est pas finie encore
VII	VII
7". T = 26"	
C'est une bête, elle habite dans la mer (W)	Tout ce qu'elle porte sur son dos ce sont ses outils, ses poignards; si elle vous prend avec la queue, elle vous ploie en deux; ici c'est son derrière; tout le reste est son corps; elle habite dans la mer; on

OBSERVATION II

Cette possédée s'appelle Hélène. Il s'agit d'une personne taciturne qui maintient des relations assez froides avec son entourage. Elle est mère de deux enfants avec lesquels elle vit seule, car elle n'a jamais pu s'entendre avec ses concubins. Contrairement à Odette qui est possédée durant les cérémonies vaudouesques, Hélène ne tombe en transe qu'en privé et en dehors de toute atmosphère rituelle. Souvent au cours de ses crises de loâ elle court vers une rivière pour se jeter à l'eau et on crie au suicide car elle ne sait pas nager.

Au Rorschach Hélène a réagi de la façon suivante :

RORSCHACH

Hélène M. (groupe expérimental)
TT = 4h. 20 — 4h. 32

Test	Enquête
I	I
16”. T = 1’40”	
Une bête volaille... une bête qui est ouverte (W)	Elle est fendue en deux — je ne sais à quelle bête elle ressemble — je vois que c’est une bête morte par-ce qu’elle n’a pas de tête
Test	
II	II
g” T = 54”	
1) Cà ressemble à du sang	
(D en bas)	
2) C’est une chair	
(W coupé)	1) Sang parce que c’est rouge, je le vois tout rouge
2) En deux morceaux — parce que je la vois unie, c’est-à-dire sans os — c’est la chair d’une bête volaille, je la vois en bon état	
III	III
10”. T = 50”	
1) Je vois du sang	
(D au milieu)	
2) Je vois deux os	
(D. personnages humains)	
3) Deux ailes	
(D. jambes de personnages)	1) Parce que c’est rouge
2) Il y a deux ailes, deux têtes	
3) A cause des deux pointes — non, je vois qu’elles ont trois pointes	
IV	IV
10”. T = 50”	
Une chair... qui est ouverte (W)	Parce qu’elle est unie — elle est ouverte, c’est-à-dire fendue en deux bords
V	V
10”. T ˜ 49”	
Une chair... qui est ouverte, elle a quatre pieds (W)	Elle n’a pas d’os — je vois quatre pieds — rien encore
VI	VI
13”. T = 47”	
Une chair, elle est ouverte, elle a quatre pieds avec une tête (W)	Parce qu’elle est ouverte — je la voie unie — je vois la tête collée à la chair — rien de plus
Je la vois unie, je la vois sans os	
VII	VII
10”. T = 31”	
Une chair... elle fait six morceaux (W)	
VIII	VIII
13”. T = 1’5”	
1) Je vois du sang	

Vu la complexité des données de Rorschach et la diversité des points de vue auxquels on peut se placer pour évaluer une personnalité à partir des signes révélés par ce test, certaines garanties méthodologiques ont été réunies afin d'assurer le maximum d'objectivité dans la façon de traiter les résultats. La procédure observée à cet égard peut se résumer comme suit :

La Méthode De Correction

Les réponses ont été corrigées d'après le système traditionnel de Klopfer. Cependant les réponses populaires et le niveau formel ont été évalués d'après les critères de Samuel Beck et de Martin Mayman (1963) pour plis de précision. Les protocoles ainsi traités ont été révisés par un second psychologue, Madame Louise Gamache-Douyon, dont le séjour pendant six années en Haïti l'a familiarisée avec le parler créole. De plus sa connaissance de la faune et de la flore de Haïti ainsi que du mode de vie local la plaçait dans une position privilégiée pour aider à apprécier les percepts et les élaborations conceptuelles particulières de nos sujets. Ajoutons enfin que sa pratique professionnelle de Rorschach en milieu psychiatrique et éducatif haïtien durant la même période de temps, jointe à mon expérience personnelle, était appe ée à supplée: à l'absence de normes expérimentales pour l'évaluation d'un Rorschach de haïtien.

La Méthode D'interpré'cation

Les données du Rorschach ont été ensuite soumises à un traitement statistique afin de rendre compte des différences entre les groupes de sujets. Cette analyse a été faite en termes d'absence ou de présence de certaines catégories, ainsi que d'une mise en relation des différents aspects de la personnalité. A cette approche atomistique succède un effort de synthèse en vue d'une évaluation globale des protocoles individuels.

Au lieu de chercher d'emblée à identifier parmi ceux-ci des entités cliniques en nous référant à des normes établies pour d'autres milieux, nous avons considéré les Rorschach de nos sujets comme des données *sui generis* devant être comparées entre elles, sur la base d'une analyse purement perceptuelle. Une première inspection des quarante-quatre protocoles nous amena à les diviser selon plusieurs groupes de Rorschach semblables. L'examen de ces groupes nous fit découvrir que de tous les critères de discrimination, seuls le niveau formel et la qualité du contenu paraissaient vraiment différentiels.

Nous avons décidé alors de sélectionner ces deux critères comme principes de classement en vue d'arriver à ordonner nos sujets selon une échelle de personnalité. Les Rorschach ainsi classés par deux psychologues ont été soumis ensuite à l'appréciation d'un troisième psychologue comme juge indépendant. Il s'agit de Madame Denise Tourillon-Stoealer qui a été choisie à cause de sa longue expérience du Rorschach, et

de sa connaissance des réalités culturelles anti llaises acquises au cours de ses voyages et de ses activités de recherche sur le terrain. Madame Stoehler connaissait nos critères mais ignorait la catégorie particulière assignée à cnaque sujet ainsi que l'identité des possédées et des sujets du groupe-témoin.

L'accord entre son classement et le nôtre fut réalisé dans 79 pour-cent des cas. Les protocoles différemment classés furent analysés à nouveau au cours d'une réunion spéciale avec chacune des deux juges. Les divergences furent conciliées grâce à une application plus raffinée de nos critères communs. A la suite d'un accord final pour une répartition en quatre groupes des sujets, ceux-ci furent distribués de part et d'autre d'une médiane conventionnelle et un test de signification statistique approprié fut appliqué (Siegel, 1956).

Dans l'analyse des résultats, nous exposerons d'abord les données du psychogramme, puis celles des inter-corrélations et du contenu. Nous essayerons enfin de caractériser le type de personnalité des différents sujets composant notre groupe contrôle et nos deux sous-groupes expérimentaux.

Analyse Du Psychogramme

Nous avons reproduit aux figures 1 et 2 íes psychogrammes moyens des sujets. Dans le calcul des moyennes, nous avons tenu compte des scores principaux et additionnels à la fois en accordant à ces derniers la moitié du poids des premiers. Bien que les réponses additionnelles soient très rares, elles ont été intégrées aux calculs afin de mieux préciser la structure de la personnalité. En examinant ces profils, nous remarquons tout d'abord une grande disproportion dans la distribution des catégories. Il y a une grande colonne de réponses formes, une absence relative de texture, de clair-obscur et de mouvement humain, et un nette prédominanc des couleurs achromatique et chromatique.

On remarquera également que les psychogrammes sont très semblables d'un groupe à l'autre. Les moyennes sont pour la plupart inférieures à 1. Sauf pour F, C' et CF, les différences entre ces moyennes sont voisines de zéro. Si le groupe expérimental manifeste plus d'anxiété et une plus grande constriction de la personnalité, le groupe contrôle présente au contraire et d'une manière paradoxale, beaucoup plus de chaleur émotive. Par contre le niveau de maturité et la qualité du contrôle sur l'expression affective sont identiques dans les deux groupes.

Analyse Quantitative (Selon Les Categories)

Nous savons toutefois que lorsqu'on compare des graphiques de groupe, les scores moyens ne sont représentatifs d'aucune performance individuelle et en conséquence ils servent plutôt à masquer les différences réelles ou à mettre en évidence des similitudes illusoires. Autrement dit, le Rorschach moyen d'un groupe peut paraître normal, tandis

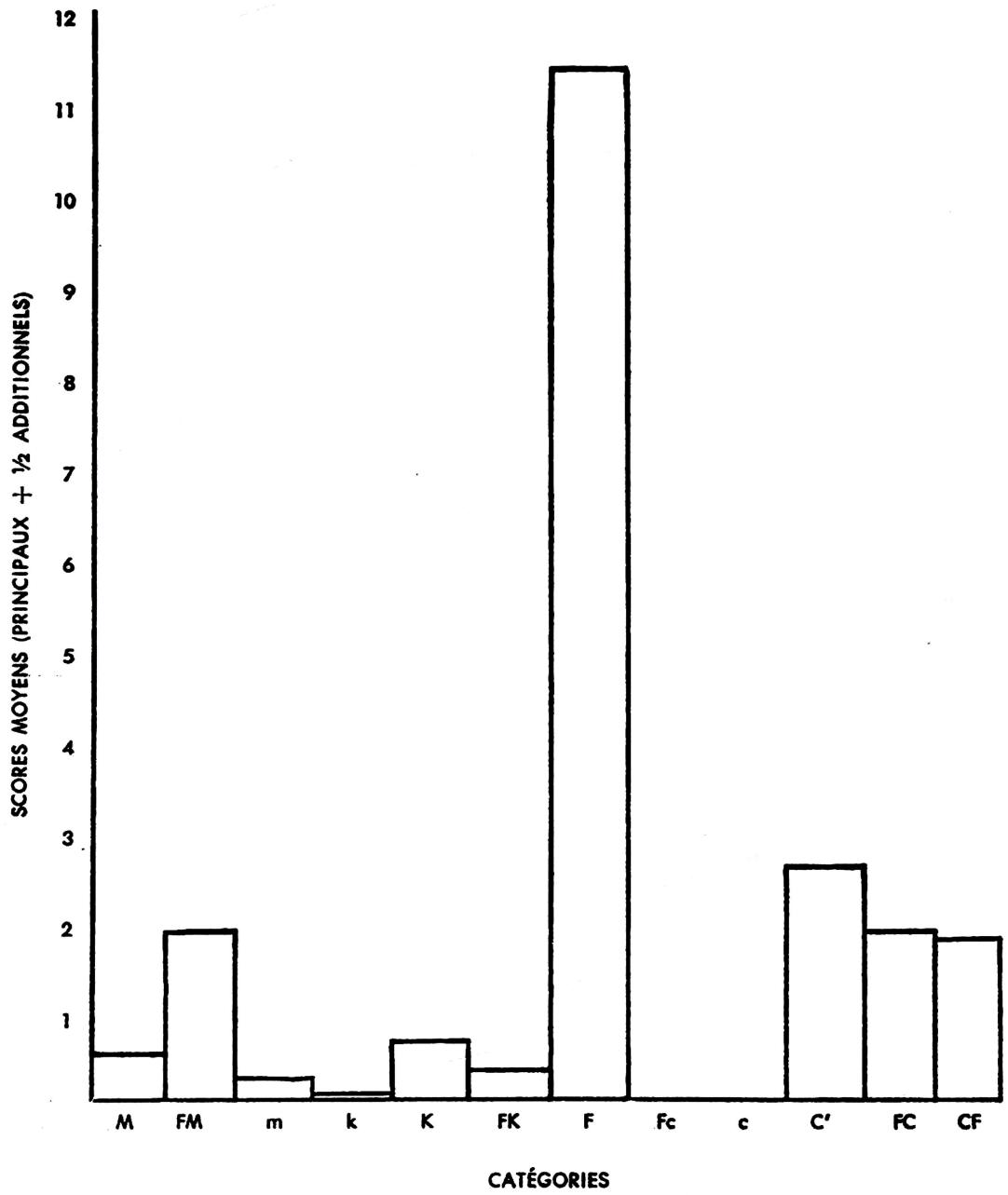

FIG. 1 — Rorschach: Psychogramme du groupe expérimental (N: 25)

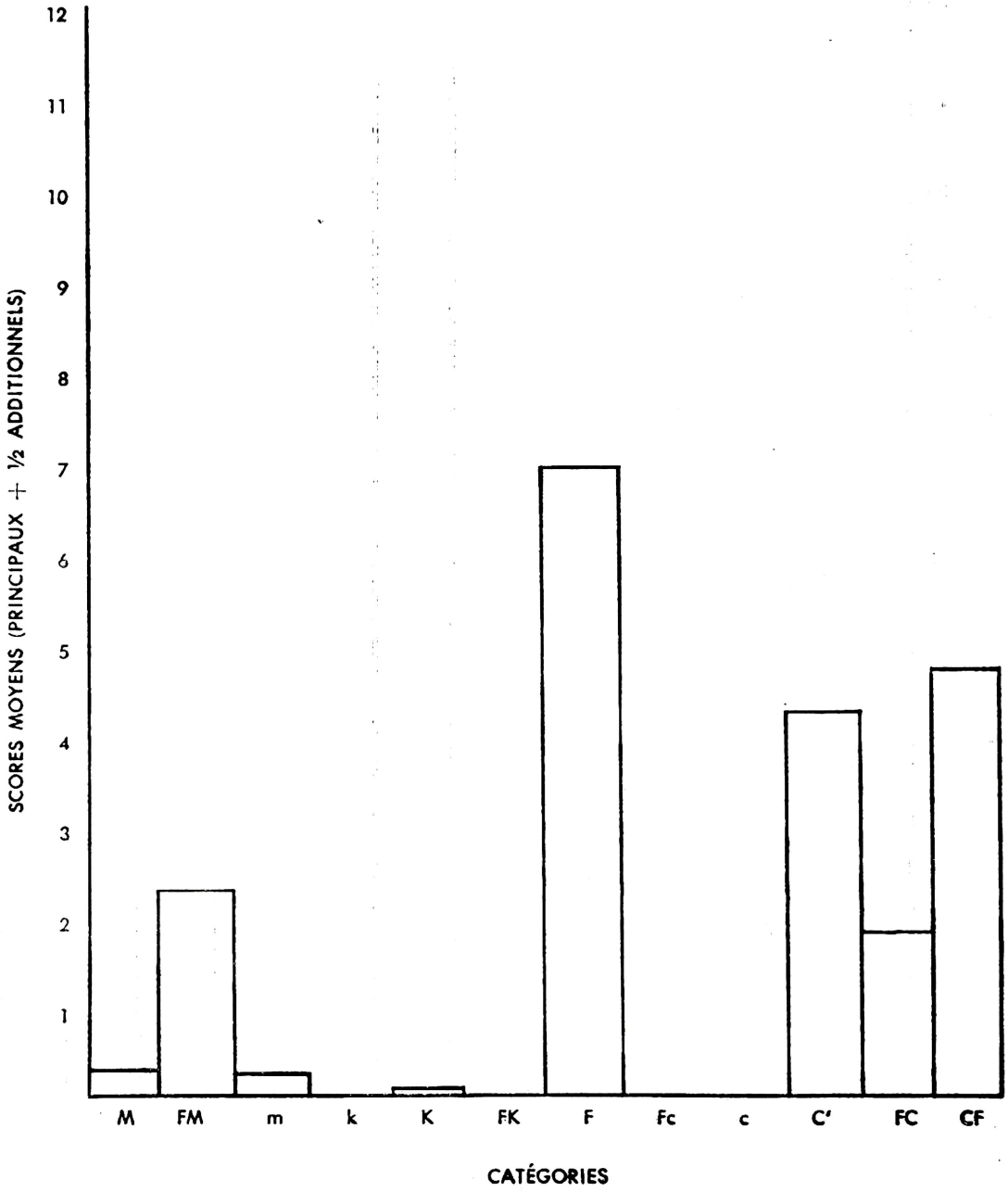

FIG. 2 — Rorschach: Psychogramme du groupe controle (N: 19)

que plusieurs protoco es ano maux sont faussement représentés par ce profil moyen qui tend toujours à niveler les caractéristiques particulières. C'est ainsi que bien des catégories peuvent apparaître dans un groupe, seulement parce que certains sujets les ont utilisées en grand nombre dans leurs réponses, même si les autres n'en ont rien fourni. D'où un grand décalage entre le profil du groupe et celui de chaque individu.

Cette remarque s'applique particulièrement à nos données. Nous observons en effet que pour beaucoup de catégories, la plupart des cellules individuelles sont représentées par zéro. Ce qui importe donc ici, ce n'est pas la quantité moyenne de telle ou telle catégorie dans chaque groupe, que l'absence ou la présence de chacune de ces catégories dans îes Rorschach individuels. Entre cinq et six réponses 'mouvement' il n'y a pas de différence notable, mais entre un sujet qui met l'accent sur le mouvement dans l'organisation des taches d'encre et un autre qui est incapable d'en projeter sur ces mêmes taches, il y a là une différence de personnalité autrement significative.

Notre analyse quantitative vise donc à déterminer chez nos sujets la fréquence relative de chaque catégorie en regard du rationnel qui la sous-entend. Comme ces catégories n'existent pas à l'état isolé dans la structure de la personnalité, mais entretiennent au contraire des relations dynamiques interdépendantes, nous nous attacherons surtout à grouper nos données quant aux différents aspects de la personnalité.

L'examen du tableau 1 indique cette même similitude générale entre les sujets, telle que révélée par les psychogrammes comparés des deux groupes. Les différences ne paraissent statistiquement significatives que sous le rapport de l'anxiété, de l'anticipation de cette anxiété consécutive à un trauma ancien, d'une déficience dans le système de contrôle chez le groupe expérimental, d'une plus grande stéréotypie et d'une attitude plus défensive chez le groupe contrôle.

Ces résultats n'indiquent évidemment que certaines tendances de groupe. Même s'ils pointent vers des configurations différentes de personnalité, ils ne révèlent pas les variations individuelles à l'intérieur de chaque groupe. Nous ne savons rien non plus des objets ou des circonstances particulières liés à cette anxiété, ni de la nature de ce trauma, ni des facteurs qui conditionnent cette perte de contrôle, ni de la signification d'une telle activité défensive, ni de l'expression des affects et des verbalisations qui ni sont pas reflétées dans les scores.

TABLEAU 1

	GROUPE EX-PÉRIMENTAL (N: 25) N	GROUPE CONT-ROLE (N: 19) N	X^2	P	
M	8	5	0.0057	—	
FM	18	16	1.74	—	
M FM + m	15	15	2.76	—	
m	6	4	0.01	—	
k	10	...	...		
K	9	1	4.18	.05	
FK	1	0	...	...	
F% 60	15	10	0.03	—	
Fo(P) 2	10	3	1.98	—	
F—,Fw— ,Fs	x				
F+,Fw 4- ,Fo,F V	17	7	3.06	.05	(très
Fc	1	0	...	...	voisin)
c	0	0	...	—.	
C’	23	12	3.88	.05	
FC	13	11	0.30	—	
CF	20	12	0.81	—	
C	0	10	...	...	
CF FC	14	0	0.0069	—	
SumC M	19	12	0.34	—	
T/R 60”	12	10	0.37	—	
R 20	17	15	1.32	—	
A % 50	8	11	4.10	.05	
H et Hd	18	11	0.43	—	
Rejet	2	7	7.43	.05	
Succession	0	0	...	...	

Léénde du tableau 1
—: non significatif
...: calcul non requis
Fo,F—,Fw>Fs,F-|-jFw-HFv: subdivision du niveau formel selon Martin Mayman (1963)

Analyse Qualitative (Selon Les Protocoles)

Lorsque nous passons de la quantification des données à l’analyse de la séquence et dv contenu des réponses, nous remarquons que es différences sont beaucoup plus

accusées en regard des protocoles individuels. Ceux-ci réfèrent en général au même contenu ordinaire animal, humain, plante, objet, dans la presque totalité des cas. Mais les pourcentages de catégories déviantes, telles que confusion, logique autistique, bizarrerie, persévération, contamination, position, phrases automatiques, combinaison tabulée, réponse absurde, ainsi que la prédominance des formes mauvaises, faibles et gâtées semblent indiquer l'existence de processus associatifs très différents d'un sujet à l'autre.

Si nous appelons valence négative (V.N%) le *pourcentage des formes non acceptables* (F—, FW—, Fs); et D% le *pourcentage de réponses déviantes,* en nous servant de ces deux critères de discrimination comme principes de classification, nous pouvons répartir tous les protocoles dans les catégories suivantes:

(type de réponse: fabulation et absurde en petit nombre)

(Type de réponse: combinaison fabulée)

Catégories	Nombre de sujets (N: 44)	Groupe expérimental (N: 25)	Groupe contrôle (N: 19)
I	15	2	13
II	16	11	5
III	10	10	0
IV	3	2	1

La simple inspection visuelle de ce tableau révèle que les sujets du groupe contrôle se trouvent concentrés dans la catégorie I, 'personnalité pauvre,' tandis que ceux du groupe expérimental tombent à l'exception de deux sujets dans les catégories dites 'inadéquate,' 'perturbée,' et 'complètement perturbée'. Si nous considérons cette distribution comme une échelle qui va du moins au plus nous constatons que les possédées sont beaucoup plus perturbées au point de vue personnalité.

D'ailleurs en combinant les catégories deux à deux (I et II), (III et IV), et en fixant la ligne de démarcation ou la médiane des quatre groupes entre les catégories II et III, nous découvrons le schéma suivant:

TABLEAU 4

Echelle	(—)	(+)
Catégories	I et II	III et IV
Groupe expérimental	13	12
Groupe contrôle	18	1

Si nous considérons maintenant le cas particulier des sous-groupes de possédées, nous notons qu'il ne semble pas y avoir de différence entre les possédées à tendance rituelle (N: 17) et celles à tendance non-rituelle (N: 8). Les sujets des deux groupes

tendent à se concentrer dans les catégories II et III. Cependant, sur les huit possédées dont la crise survient en dehors des cérémonies cinq se situent dans la catégorie 'perturbée' (III), deux dans la catégorie 'inadéquate' (II), et une seule dans la catégorie 'pauvre' (I). Le test chi-deux (X^2) appliqué à ce cas indique une valeur non significative de 2.02. Il conviendrait sans doute d'augmenter le nombre de sujets dans ce groupe trop restreint pour vérifier à nouveau si entre les deux sous-groupes expérimentaux le degré de perturbation est vraiment différentiel.

En résumé, l'analyse des données du test Rorschach mène aux conclusions suivantes :

1. Les psychogrammes comparés des deux grands groupes se ressemblent en général tant par l'absence de certaines catégories que par la présence de quelques autres.

2. L'analyse quantitative montre cependant que derrière cette apparente similitude de profils, se trouvent des différences fondamentales.

3. Ces différences sont statistiquement significatives ou tendent à l'être, surtout en ce qui regarde l'anxiété, l'anticipation de cette anxiété liée à un trauma, la qualité de contrôle sur les impulsions (groupe expérimental ;, la stéréotypie de la pensée et l'activité défensive du moi (groupe contrôle).

4. La personnalité des possédées, en regard de notre évaluation personnelle des protocoles individuels contre validée par les opinions de deux autres psychologues agissant en qualité de juges, a été trouvée significativement plus perturbée que celle des sujets-témoins.

5. Cette perturbation est beaucoup plus prononcée pour certaines 'criseuses de loâ,' lorsque celles-ci sont comparées à d autres possédées. Mais il manque de preuve consistante que la tendance à faire des crises en dehors des cérémonies vaudouesques soit plus pathologique que la tendance contraire qui consiste à tomber en transe surtout au cours d'un rite quelconque du vaudou.

6. La personnalité des possédées, nettement différente de celle de la paysanne haïtienne moyenne, dénote une constellation de traits que par extrapolation culturelle nous pourrions qualifier de névrotique dans certains cas et de psychotique dans d'autres.

7. Contrairement à l'opinion courante qui voit dans la crise de possession une manifestation purement hystérique, l'examen au Rorschach des possédées a prouvé que la transe vaudouesque ne se réduit pas à un profil psychologique uniforme, mais s'accommode de types très diversifiés de personnalité. En d'autres termes la crise de possession peut se retrouver aussi bien chez un hystérique, une déprimée ou une schizophrène, bien que sa phénoménologie, comme nous l'avons démontré ailleurs (Douyon, 1965), révèle un arrière-fond typiquement dépressif. C'est dire qu'en définitive il faut être psychologiquement troublé pour tomber en transe mais qu'une possédée, qu'elle soit névrosée ou psychosée, ne peut être vraiment comprise qu'à partir de la notion de désespoir.

Glossaire

Bacca: sorte de gros chien noir.

Cheval: La possédée représente la monture du Loâ.

Crise de loâ: signifie crise de possession ou transe vaudouesque.

Canzo: Individu qui a reçu l'initiation au vaudou, ou la cérémonie elle-même.

Criseuse de loâ: Néologisme préféré au terme traditionnel de possédée. Il indique d'une façon spécifique la personne sujette aux transes dans le vaudou et non à la possession démoniaque (selon le peuple).

Loâ: Mot clef dans le vaudou. Il désigne tous les esprits ou 'mystères' grands et petits qui sont à l'origine de la crise de possession.

Vaudou: Nom générique des divinités dahoméennes. Désigne ici un ensemble de croyances et de rites qui participent à la fois du magique et du religieux.

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Can the EEG Be Used in the Study of Possession States?

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The unusual behavior and the alterations of consciousness that are associated with possession phenomena suggest an altered state of cerebral physiology. Until now, however, possession states have not been studied physiologically, and such an omission is easy to understand. As Bourguignon (1965) has pointed out, For the investigation of psycho-physiological states, it would be relevant to gather physiological data; however, gathering physiological data in the sacred context of most possession phenomena is difficult or impossible." In this paper I shall briefly review some evidence which indicates that electroencephalographic studies of possession states might be fruitful; and I shall also describe recently developed methods for telemeter ng the EEG, methods which might be employed to study these states in the laboratory and perhaps in the field.

Psychomotor Amnesic States and the EEG

Possession states may be regarded as one cluster or subgroup within a wider class of phenomena, a class of phenomena characterized by (1) an altered state of consciousness, (2) elaborate motor behavior, and (3) subsequent amnesia for the duration of the altered state of consciousness. Let us use the expression 'psychomotor amnesic states' to designate this wider class, which, in addition to possession states, includes psychomotor epilepsy, hysterical fugue states, sleepwalking, hypnotically induced somnambulistic states, and some forms of multiple personality. While some of these states are associated with gross neurophysiological changes that are demonstrable in the EEG, no such EEG changes occur with others. Can we expect that EEG studies of possession states would demonstrate alte'ations in neurophysiology? In an attempt to answer this question, let us first review some of those states which have already been subjected to study.

Psychomotor Epilesy

Psychomotor epilepsy is one of the common types of epileptic disorder, the other major types being *grand mal* and *petit mal* epilepsy. The expression 'psychomotor epilepsy' has replaced such older terms as 'psychic equivalent,' 'ictal automatism,' 'fugue states,' etc. Psychomotor epilepsy is relatively common. In one series reported by Gibbs and Gibbs (1952), which included 11,612 cases of epileptic disorders, 678 cases suffered psychomotor seizures only, and many more suffered both *grand mal* and psychomotor seizures.

Psychomotor seizures are characterized by poorly co-ordinated, but elaborate and apparently purposeful movements. There may be a prodromal period of a few hours or a few days, during which the patient is restless and irritable; gastric auras (a subjective sensation of something rising from the stomach) are common precursors of the seizure proper. The patient does not, as a rule, lose consciousness completely, but is usually amnesic for the period of the seizure. Gibbs and Gibbs describe the general nature of the seizures as follows:

> Often there are manifestations of emotional excitement with screaming and shouting. In most cases the movements consist of simple acts such as smacking the lips, wringing the hands, or plucking and clutching at objects. In some cases, however, the movements are more elaborate and clearly purposeful; for example going to get a drink of water, undressing, or taking all the dishes off the kitchen shelf. Speech is often unaffected, except as regards content, but there may be a babbling type of speech and in rare cases the attack is followed by speech impairment... After the seizure, the patient may try to account for his actions on a rational basis and when told of something he did during the seizure, which he does not remember clearly, he may pretend that he remembers perfectly and try to explain his conduct in detail.

The following excerpt from cases described by Hughlings Jackson (1875) illustrates the complexity of the behavior that may occur during these psychomotor seizures :

> My wife and her sister had been talking about supper when it was agreed that my wife and I should have some cold fowl, and the sister some cocoa if there were any fire. She went into the kitchen to see and reported that there was one. Soon after I began to feel chilly after being so warm with gardening and I said I would go down to the fire. I did so; and after standing there a few minutes, I felt symptoms of an attack, and sat down, I believe, on a chair against the wall. And here my recollection failed, the next thing I was conscious of being in the presence of my brother and mother (who had been sent for as they live opposite) and I have since been informed by my sister-in-law that she came into the kitchen, and found me standing by

> the table mixing cocoa in a dirty galley pot, half filled with bread and milk intended for the cat, and stirring the mixture with a mustard spoon, which I must have gone to the cupboard to obtain
>
> This caused them to send for my friends to whom I talked showing no surprise that they were there, and entirely unconscious of what I had been doing until told this morning.

A second excerpt, also from Hughlings Jackson, describes another example of highly complex behavior occurring during a psychomotor seizure :

> I was in a shop in Twickenham seeking an order for wines; I suddenly fell on my back—the first time I have fallen in a fit for six or nine months. The shopman at once came from behind the counter, and with the assistance of a friend raised me. I instantly threw my arms about and shook both off, but they caught hold of me again and led me out of the shop, when the friend left and I again made my escape from the shopman, leaving my hat and order book behind. The shopman then got a man to mind his shop, and he and two policemen went in search of me all going different ways.
>
> He first discovered me a quarter of a mile away, asking for my hat at all the shops, but not having recovered my senses, nor did I until I got to the railway ten minutes after.

Such seizures may be from a few minutes in duration to a few hours, rarely a few days. Sometimes crimes are committed during these states. (The resemblance between these states and some possession phenomena is to be noted: for example, the young Bushmen described by Lee in this volume, pp. 40–42; particularly those who are learning to enter the trance state and who run off into the woods, jump into the fire, and engage in other impulsive behavior, p. 47.)

EEG studies reveal that psychomotor seizures are associated with seizure discharges consisting of bursts of serrated slow waves; flat topped, four-per-second waves and high voltage, six-per-second waves; examples are included in Gibbs and Gibbs (1952), pp. 172–81. Patients generally have a focus of such seizure discharges in the anterior temporal lobe. The activity of all cortical areas, except the anterior temporal, is usually normal in the interseizure period, and even the anterior temporal area is usually normal in the waking state. Only 30 per cent of patients with a clinical history of psychomotor seizures show an abnormality in the waking state, however 88 per cent of such patients show random spikes from the anterior temporal area during sleep.

Sleepwalking

Sleepwalking is another relatively common phenomenon in which elaborate, apparently purposeful behavior occurs during an altered state of consciousness with partial

or complete amnesia. Consider two examples from my own practice. A hospitalized female patient got up during the night, dressed herself, and went down to the lower floor, which was for male patients. A twenty-five-year-old male habitually took a blanket, walked down the hall to his mother's room, laid the blanket at the foot of his mother's bed, and slept there for the rest of the night. Both patients were amnesic for the somnambulistic period.

Because sleepwalking is not regarded as an illness, and because standard EG procedures would no doubt awaken the subject, EEG studies have not been carried out until very recently. Jacobson *et al.* (1965), however, have used a telemetering technique (which will be described below) to study the EEG of the sleepwalker. Although they were more interested in determining whether sleepwalking occurred during a period of dreaming than they were in studying the EEG during sleepwalking, their method and their findings are worth reporting.

Nine subjects with reputedly frequent episodes of sleepwalking were studied in the laboratory for a total of forty-seven nights. EEG, submental electromyograms, and eye movements were continuously monitored throughout the night. The authors defined sleepwalking as any activity from sitting upright in bed to actual walking. Sixty-five incidents of sitting and nine of walking were observed. During these incidents, the subjects appeared to be aware of their environment but remained indifferent to it. Their eyes were open, their expressions blank, and their movements somewhat rigid. Sometimes the subjects would pull at the electrodes and cables and more rarely they would run, jump, or appear to be searching for something. Talking was common; if spoken to, the subject answered in monosyllables, as if annoyed. In the morning, there was complete amnesia for the incidents of the night before.

The authors report their physiological findings as follows:

> AH incidents began during slow-wave sleep, rather than during periods of rapid eye movements. [Rapid eye movements occur when the subject is dreaming, so this study suggests that sleepwalking does not occur while the subject is dreaming.] Typically, the incidents began during stages 3
>
> 1–3 cycles per sec. in the EEG. This EEG pattern, which was similar to that seen in partial arousals in normal children, persisted from 10 to 30
>
> seconds, it was followed by waves of lower amplitude primarily in the delta range and resembling slow-wave sleep. This type of EEG activity persisted if the incidents did not last longer than 20 to 40 seconds. After lying down, spindles and slow waves typical of a lighter sleep appeared in the EEG. The longest somnabulistic incidents (up to 7 minutes) showed low voltage tracings consisting of theta, alpha, and beta frequencies. About one fourth of all incidents were followed by an EEG pattern characteristic of waking. Occasionnally, the subject showed a rhythm of alpha frequency similar to that of wakefulness but not blocked by eyeopening.

Clearly, further s udies of the EEG during episodes of sleepwalking are called for. From the present evidence, however, the EEG of the sleepwalker differs in most cases from the EEG of a person in the waking state.

Hysterical Fugue States

In the hysterical fugue state, just as in cases of sleepwalking and epileptic seizure, very comp ex motor activity may occur. The patient's behavior and speech may be so 'normal' that the casual observer will perceive nothing amiss. Such episodes may be of several hours or even weeks in duration and may be followed by complete amnesia. Classically, the patient's beiavior during the fugue is related to the patient's personal conflicts. Such states were evidently common in the nineteenth century, but in the West today they are rare, except perhaps in certain lower class communities. The following example is taken from the writings of the famous student of hysterical states, Pierre Janet (1929). The episode described occurred following the death of the young woman's mother. That the fugue behavior has personal significance is evident :

> The crises last for hours, and they show a splendid dramatic performance, for no actress could rehearse those lugubrious scenes with such perfection. The young girl has the singular habit of acting again all the events that took place at her mother's death, without forgetting the least detail. Sometimes she only speaks, relating all that happened with great volubility, putting questions and answers in turn, or asking questions only, and seeming to listen for the answer; sometimes she only sees the sight, looking with frightened face and staring on the various scenes, and acting according to what she sees. At other times she combines all hallucinations, words and acts, and seems to play a very singular drama. When in her drama death has taken place, she carries on the same idea, and makes everything ready for her own suicide. She discusses it aloud, seems to speak with her mother, to receive advice from her; she fancies she will try to be run over by a locomotive. The detail is also a recollection of real events of her life. She fancies she is on the way, stretches herself out on the floor of the room, waiting for death, with mingled dread and impatience. She poses, and wears on her face expressions really worthy of admiration, which remain fixed during several minutes. The train arrives before her staring eyes, she utters a terrible shriek and falls back motionless, as if she were dead. She soon gets up and begins acting over again one of the preceding scenes. In fact one of the characteristics of these somnambulisms is that they repeat themselves indefinitely. Not only the different attacks are exactly alike, repeating the same movements, expressions, and words, but in the course of the same attack, when it has lasted a certain time, the same scene may be repeated again exactly in the same way five or ten times. At last, the agitation seems

> to wear out, the dream grows less clear, and, gradually or suddenly according to the cases, the patient comes back to her normal consciousness, takes up her ordinary business, quite undisturbed by what has happened.

What of the EEG findings during hysterical fugue states? Most authors report that the EEG recorded during this form of psychomotor amnesic state is not different from that of the normal waking state. Hill (1963), for example, tvrites:

> During hysterical trance states, fits, or other dissociative phenomena, no significant change in the cortical rhythms is detectable. The character of the resting record either remains unaltered or, if the eyes are opened during an attack, some degree of blocking of alpha rhythm is apparent.

Similarly, in hypnotically induced trance states the EEG is not distinguishable from that of the normal waking state. If the suggestion is given to a hypnotized subject that he cannot see when his eyes are open, there is no return of alpha rhythm; the alpha rhythm remains blocked, just as if he were in a normal waking state with his eyes open (Hill, 1963).

Features of Possession States Suggesting an Altered Neurophysiology

It is clear, then, that some psychomotor amnesic states are associated with alterations in the EEG and also that some are not. Can we predict whether possession states are likely to be associated with changes in the EEG? In some respects, possession states seem to be more like the hysterical fugue state or the hypnotically induced trance, neither of which involves change in the EEG. On the other hand, there are several features of possession states which are unlike any features of hysterical phenomena and which suggest a basic neurophysiological alteration. Study of the literature on the subject indicates that the following features are associated with possession states throughout widely different cultures :

1) Induction of the state is frequently achieved through dancing to music which features a pronounced and rapid beat.

2) Induction frequently occurs following a period of starvation and/or a period of overbreathing.

3) The onset of possession is marked by a brief period of inhibition or collapse.

4) In the neophyte, collapse may be followed by a period of hyperactivity; once experience is acquired, a controlled, deityspecific behavior pattern emerges.

5) During the state of possession there is frequently a fine tremor of head and limbs; sometimes grosser, convulsive jerks occur. A diminution of sensory acuity may be evident.

6) Return to normal consciousness is followed by a sleep of exhaustion, from which the subject awakens in a state of mild euphoria.

The following description by Margaret Field (1960), who made her observations in southern Ghana, illustrates most of these features :

The sound of excited drums, gpng-gongs, rattles, or rhythmic clapping and singing is the usual agent for precipitating a dissociation fit, both in the novice and the habituated okomfo... Probably the greatest aid to dissociation is hypoglycaemia. On shrine working days the priest eats nothing. Often when one seeks out the history of someone possessed for the first time one learns that he had gone out early in the morning without eating, to hunt, to farm or to collect firewood, had stayed out, fasting, all day and had come home in the evening possessed...

The possession fit... is preceded by a few minutes of dazed and dreamy inaccessibility. The person is speechless, sometimes fidgeting as in an insulin sopor and usually looks oppressed. He sits head-in-hands, or huddles himself on the ground with his head over his knees, or if he is standing, he may sway with drooping eyelids as if 'asleep on his feet'. Sometimes the fit aborts and never gets beyond this stage of confused inhibition... the short confusional phase suddenly gives way to intense motor excitement. The medium leaps to his feet with flailing arms, quivering, dancing, leaping, singing, shouting, and perhaps prophesying with words regarded as not his own. Great feats of strength and endurance may be performed under this excitement. Sometimes the medium runs for miles, sometimes he spins like a top for minutes on end with no appearance of vestibular embarrassment. Often he throws off his clothes but never outrages decency. Once, when military *asafo* companies of excited young men were dancing at the chief's funeral, I saw a youth become possessed, seize a passing hen, tear it limb from limb and eat it — or partially eat it — alive. More often the performance is quieter, but never is the medium quite still. He is always in a quivering vibration. If he stands in one spot he usually jigs from one foot to the other. The unceasing tremor may be either coarse of fine; his head may look as if it must be shaken right off, or he may walk so sedately that only close observation reveals that his toes and fingers are finely trembling. The facial expression is usually mask-like. The eyes may be either fixed or staring, almost closed, or they may roll, in all these cases appearing useless but proving adequate...

The end of the excitement is abrupt. The medium flings himself against a wall, on the ground, on a seat, or into someone's arms and becomes limp. A genuinely bewildered expression overspreads his face —- that of someone waking from sleep in unfamiliar surroundings. In an elderly medium, the face, as it abruptly gains awareness, seems suddenly to age. An expression of appropriate pain and discomfort appears as the medium becomes aware of his aching limbs, his bruises, his thirst, and so forth. The exhaustion that follows is appropriate to the amount of physical energy expended and the medium usually falls asleep, sometimes then and there, but more often after staggering home to his house...

The genuinely dissociated person describes a complete amnesia for the period of dissociation.

Another feature described by some subjects is an aftermath of peaceful euphoria. This, of course, may be masked by extreme exhaustion, bruises, and other discomforts of over-exertion.

Of the various features of possession states listed and described above, several features clearly indicate the likelihood of alterations in the neurophysiology of the person possessed. For example, hypoglycaemia and overbreathing bring about changes in the MEG; both cause the appearance of slow waves (down to 2–3 cycles per second), and usually, three minutes of overbreathing is sufficient to produce such effects. Hypoglycaemia and overbreathing, the initial collapse state, muscular jerks, and fine tremors of head and limbs, all suggest the presence of changes in neurophysiology. Surely the evidence here is suggestive enough to warrant the use of the EEG, first, to ascertain the presence of neurophysiological changes, and, second, to investigate the precise nature of those changes.

Sargant and Therapeutic Collapse

Sargant (1964), using a Pavlovian model, explains possession states in neurophysiological terms. According to Sargant, Pavlov has shown that dogs 'break down' when stresses or conflicts become too great for their nervous systems to master. Furthermore, a lowering of resistance to breakdown can be brought about by fatigue, drugs, glandular changes, and other forms of stimulation. The form of breakdown behavior varies according to the temperament of the dog and the degree of stimulation, but most important for Sargant was the observation that dogs may undergo a kind of sudden and complete inhibitory collapse which brings about the suppression of previously learned responses and an increased susceptibility to suggestion.

Sargant believes that these observations illuminate a wide variety of human behavior. For example, when a soldier suffering from battle fatigue can be induced to experience strong emotions of fear or anger he often suffers a collapse state from which he awakens considerably improved in mental health :

> In some of the acute Normandy battie-neuroses, and those caused by V-bomb explosions, quite imaginary situations to abreact the emotions of fear or anger could be suggested to a patient under drugs... Outbursts of fear or anger thus deliberately induced and stimulated to a crescendo by the therapist, would frequently be ?-ollowed by a sudden emotional collapse. The patient would fall back inert on the couch... It then often happened that he reported a dramatic disappearance of many nervous symptoms.

The reason for the disappearance of the symptoms is not clearly stated, but presumab y Sargant believes that the state of collapse results in the erasure of previous fears and that the concurrent state of increased suggestibility opens the patient to the salubrious suggestions of the physician.

Sargant suggests that the heli-fire preaching of John Wesley, which often produced states of collapse in members of his audience, is an example of the same phenomenon. Wesley noted in his journal for June 15, 1739:

> Some sunk down and there remained no strength in them; others exceedingly trembled and quaked; some were torn with a kind of convulsive motion in every part of their bodies, and that so violently that often four or five persons could not hold on to them.

Brainwashing is another example. Subjects are excited or otherwise stressed to the point of collapse, the cerebral slate is wiped clean, and new modes of behavior or belief are imprinted.

Sargant feels that possession states are examples of the same process. lie regards the combination of the strenuous activity hat frequently takes place during possession, the overbreathing, dancing and drumming, and general excitement as providing the 'over-stimulation' and he conceives of the terminal sleep of the possessed as the period of 'complete inhibitory collapse'. He is evidently not interested in the period of collapse before the onset of the possessed state, nor in the altered state of consciousness during possession. Consider the following passage :

> Rhythmic drumming is found in the ceremonies of many primitive religions all over the world. The accompanying excitement and dancing is also maintained until the same point of physical and emotional collapse has been reached. Alcohol and other drugs are often used to heighten the excitement of religious dancers and this too hastens the breakdown...
>
> The Voodoo cult in Haiti shows with what ease suggestibility can be increased by subjecting the brain to severe physiological stresses... The *loa* are believed to descend and take possession of a person, usually while he or she is dancing to the drums. The possessed person then behaves as the particular deity should behave; the different habits of *loa* being a matter of tradition. As with soldiers who continue to fight after being temporarily stunned by an explosion, or football players who get kicked on the head in the early stages of an exciting match, the possessed have no recollection when they come to themselves again an hour or so later, of what has seemed to others an intelligent and effective performance.
>
> The case of men and women who have been worked up into a state of suggestibility by Voodoo drumming shows the power of such methods.
>
> Though apparently unconscious, they carry out all the detailed behaviour expected of the particular deity by which they believe themselves possessed. A Voodoo priest increases excitement and suggestibility by altering the loudness and rhythms of the drums just as in the religious snake-handling

> cult, which I observed myself in the United States; the preacher used the tempo and volume of singing and handclapping to intensify the religious enthusiasm, and emotional disruption was finally induced by thrusting live poisonous snakes into their hands. After a terminal collapse into stupor, both groups of participants may awake with a sense of spiritual rebirth.

Sargant has very little to say about the subjective experience of being possessed (other than to compare the person possessed to a rugby player who has been kicked in the head), but speaks more of the aftereffects of possession and of the reason for the psychotherapeutic effects.

We must assume that when Sargant speaks of 'complete inhibitory collapse' he means something different from normal sleep. Most other writers on the subject consider the terminal collapse of the possessed to be simply an exhausted sleep (cf. Field quoted above, and Lee, this volume, p. 41). It seems possible that Sargant is confusing the initial collapse state with the final sleep of exhaustion. Actually, the initial col lapse state seems much the more interesting phenomenon and would, indeed, seem to be more comparable to the collapse states generated by the preaching of Wesley.

The problem is that the initial collapse states which herald possession occur frequently without any very extensive stimulation. Field (1960) describes the onset as follows:

> I have seen a young *okomfo,* desiring to be possessed go and stand quietly in front of the clanging iron gong-gong of the orchestra where, after a few minutes, his head sank slowly to his chest, and just as I was expecting him to slide to the ground he suddenly leaped quivering into the air and danced.

Similarly, I myself have observed the onset of possession within the *Sopono* cult of Nigeria (1964) and have described the phenomenon as follows :

> A knot of younger women collected about one tall old woman with a pock-marked face, all singing and moving to the drum beat. One girl stood before the old woman with her arms about her neck. They placed one of the sacrificial bowls upon the girl's head and the women began to sing louder, calling upon the spirit of the particular *Sopono* that habitually possessed this girl. The girl's face became vacant, and her eyes focused upon a distant place. Suddenly she fell forward in a kind of swoon; the 'mother' supported her; someone else seized the calabash so that it wouldn't fall; others threw water on her feet. In a few seconds she revived a little; they guided her fingers up over the rim of the calabash, and she was drawn to one side, where she stood, somewhat dazed, the 'wife' of the god.

At times, the initial collapse which heralds possession may be of longer duration; for example, the period of half death' among the Bushmen described by Lee. In the

latter instance, the period of dancing and 'stimulation' lasts for two or three hours, and this may account for the longer period of initial collapse. The Bushman example fits better with Sargant's hypothesis than do the Ghanaian or the Yoruba examples cited above, though, as I have said before, Sargant seems to be unaware of the two periods of collapse: the initial one, prior to the entry into possession, and the final collapse, which seems to be little more than a state of natural sleep consequent to considerable physical exertion. It is possible that he considers the whole sequence, from initial collapse through dissociated state to terminal exhaustion, as a period of 'cerebral inhibition'.

We might summarize Sargant's views as follows. Pavlov showed that dogs, when placed under excessive stresses, respond with several types of protective cerebral inhibition, including a collapse state that involves both the erasure of former conditioned patterns and increased suggestibility. In man, the same chain of events (i.e., excessive stimulation, collapse, erasure of former beliefs, and heightened suggestibility) occurs under many different circumstances. Sargant thinks that because this sequence is neurophysio'ogica in dogs, it is also neurophysiological in man.

It is this latter assumption that is difficult to accept. Most physicians would assume that the collapse states produced by the fiery preaching of Wesley were non-physiological in nature. Most would assume that they were more akin to hysterical seizures than to epileptic seizures and that they were the result, not of physiological overstimulation, overbreathing, hypoglycaemia, or exhaustion, but of suggestion. No EEG changes would be expected in Wesley's collapse states. Sargant's rebuttal would probably be that collapse-erasure states are far too similar around the world and throughout the ages to be the result of suggestion.

Unfortunately, Sargant does not provide us with information about the EEG correlates of Pavlov's various types of 'protective inhibition'. His theory is interesting, but unconvincing; he tries to paper the crack between the functional and the organic with arbitrary assertions, rather than with experimental evidence.

Neher and Sonic Driving

The work of Neher is somewhat more convincing and is open to verification by other workers. It has to do with the hypothesis that intense and rapid drum beats exert an effect upon the neurophysiology of the dancer and play an important role in inducing the possession state. Sargant had already written in 1957 that:

> ... electrical recordings of the human brain show that it is particularly sensitive to rhythmic stimulation by percussion and bright light among other things and certain rates of rhythm can build up recordable abnormality of brain function and explosive states of tension sufficient even to produce convulsive fits in predisposed subjects. Some people can be persuaded to

> dance in time with such rhythms until they collapse in exhaustion. Furthermore, it is easier to disorganize the normal functions of the brain by attacking it simultaneously with several strong rhythms played at different tempos.

Although the effect of 'rhythmic stimulation by bright light' was well known and well documented (see Walter, 1953), the parallel effect of stimulation by rhythmic sound, as far as I can discover, had not been demonstrated in 957 and Sargant provides us with no references. Neher filled his gap. But before discussing Neher and sonic driving, a word about the effect of rhythmically flashing light upon the brain would be in order.

The phenomenon known as 'photic driving' is well known: light flashing at or near the alpha rhythm of the brain produces an increase in amplitude of resting rhythms. If the frequency of flashing is shifted somewhat, the brain frequency follows to take up the new frequency of he light and the subject experiences a variety of subjective responses: for example, kaleidoscopic color patterns; kinesthetic sensations, s ch as swaying and spinning; cutaneous singling and alterations in the feeling state, such as ear, disgust, anger, confusion, and fatigue. Finally, myoclonic jerks may appear and a full-blown *grand mal* seizure may develop.

Neher, in two papers (1961 and 1962), has demonstrated a parallel auditory-driving effect and proposes an hypothesis that this effect may be of significance in the genesis of the states of possession and trance associated with the beat of drums.

Ten volunteers, aged seventeen to thirty-one, with normal EEG's were used as experimental subjects. As an auditory stimulus a snare drum with snares removed was beaten at different rates. This produced a complex sound of low frequency (175–15) cycles per second) and high amplitude (120 dB), with rapid rise and decline. Two types of stimulation period were used: (1) forty seconds of stimulation followed by forty seconds of rest at each of four frequencies, three, four, six, and eight per second (it is difficult to beat the drum faster); (2) four minutes of solid stimulation at four beats per second. In other words, the drum was beaten very quickly and very loudly. Driving responses similar to the responses associated with photic driving were noted in all subjects. The location of the main driving response was the auditory cortex with recruitment in other areas, par icularly the occipital cortex.

Although the alpha range (8–13 cycles per second) is most effective for photic driving, "slightly lower frequencies may be most effective for sound stimulation, due to the presence of low frequencies (theta rhythms) in the auditory regions of the cortex." Jones (1954) has made extensive studies of the music of Central and West African cultures and notes that their rhythms predominate in the 7–9 cycle per second range. A similar frequency is found in drumming associated with possession in Haiti. Most Western music is of a slower tempo, while some Oriental rhythms are faster.

Those who have had experience with photic driving, with epileptic phenomena, and with possession must accept the cogency of Neher's hypothesis. It is true, of course, that possession is frequently induced by incantation or song, or by instruments other

than drums. Nonetheless, the very frequent use of drums in association with possession around the world is certainly striking. It is possi e that auditory driving, using the drum beat at 5–8 per second, is a commonly used portal of entry into the dissociated state.

Field studies, with the Neher hypothesis in mind, could profitably be organized to study tie rhythm of the music associated with possession and to explore whether an initial training period in auditory driving was used in those instances where only incantation induces possession. It is possible that once the subject has discovered the physiological pathway into possession with the assistance of drums, *a* similar state could subsequently be induced by incantation alone.

Unfortunately, neither Neher himself nor other workers have continued studies in this area. Neher (1965) has expressed the opinion that:

> ... laboratory experiments cannot adequately substitute for studies in the field. The importance of auditory driving relative to other factors in possession states must ultimately be determined by carefully controlled field observation. I strongly doubt that any one factor such as auditory driving will be shown to be of sole, or even predominant importance in possession states; rather, such states are likely to be caused by a number of interrelated factors, from physiological to cultural, which vary greatly from one setting to another.

Telemetering the Electroencephalogram

The study of the neurophysiological aspects of possession states could be carried out in either of two ways. One could induce possession states in a laboratory where they could be studied by means of the EEG or by biochemical means. For example, Werner Cohn (1965) of the Department of Sociology, University of of British Columbia, has recently succeeded in producing glossolalia-like states in the laboratory. The subjects observed possession and glossolalia in Pentecostal meetings. On return to the laboratory, a drummer produced appropriate music and some subjects seemed to be able to enter a state similar to the states observed in the religious setting. Apart from laboratory experiments, one could study genuine states as they occur in the field. In either case, the subjects, because of their vigorous physical movements, need to be fully mobile during the course of the study.

The need for subject mobility used to be a deterrent to the study of possession states, but recently methods of telemetry have become available. In 1960, Gianascol and Yeager reported a technique for telemetering the electroencephalogram in fully mobile subjects. They described the equipment as follows:

> A transistorized telemeter about the size of a 'king-size' package of cigarettes was developed by the Research and Development Laboratory of the University of California Medical Centre, San Francisco...

> It uses a circuit which consists of a four-stage transistor amplifier, a reactance modulator, and a 30-Mcy / sec. oscillator which produces signals frequency-modulated by the patient's scalp voltages. The brain waves may be telemetered to an antenna within a radius of 40 feet and then coupled by a frequency-modulated receiver to a conventional electroencephalograph. Either needle or disk scalp electrodes may be used. Thus a trace can be made while the [subject], unencumbered by leads is able to move about freely.

A picture of the apparatus is included in the original paper. The authors remarked upon the absence of muscle-movement artifact despite the patient's unrestricted activities. Subsequently, they described an even smaller device with a two channel EEG instead of the original single channel. A photograph of this very small telemeter is included in their 1964 paper. Jacobson *et al.* (1965) reported other methods of recording the EEG in fully mobile subjects. They were particularly interested in the study of sleepwalkers, as reported above. They described two techniques: the first, a technique in which flexible cables attached to the subjects allow relative mobility of the subject with a twelve-channel EEG; and the second, a telemetric device developed in the Space Biology Laboratory of the USIA Brain Research Institute.

> This unit uses a compound modulation system with frequency-modulated audio IRIG subcarriers, multiplexed and then amplitude-modulated on a highly stable crystal-controlled, 250 milliwatt transmitter. In our application, batteries provide continuous stable transmission for more than the ten-hour requirement of the normal sleep run, including power for the EEG preamplifiers ... The unit (amplifiers and transmitter) fits comfortably into the subject's pocket or can be taped to the clothing.

This device allows three channels for the EEG and one for submen tai electromyogram.

Summary

Several types of psychomotor amnesic states were discussed, including the EEG correlates of each type.

It was pointed out that psychomotor epilepsy and sleepwalking are associated with altered EEG's, but that hysterical fugue states and hypnotic trances are not.

The common features of possession states were listed and it was noted that some of them suggest possible neurophysiological alterations: for example, frequent association with rhythmic music, overbreathing, and hypoglycaemia; the initial collapse state; muscular jerks and tremors; the highly similar pattern in diverse cultural settings. It was suggested that EEG studies are warranted.

Several methods for recording the EEG in mobile subjects were presented. »

In conclusion, it is suggested that studies should first be earned out in a laboratory setting where local EEG equipment can be used. Since states produced in the laboratory may not be comparable to those occuring in the field, subsequent studies should be carried out in their natural setting using telemeter and portable EEG equipment.

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Part III: Meaning and Purpose

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Possession States as Psychotherapy

The Psychotherapeutic Value of Spirit-Possession in Haiti

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Voodoo, the Haitian folk religion, is derived from an amalgam of African animism and Catholicism. It is an elaborate religion containing a hierarchical structure of gods, saints, and angels, a sacred cult, propitiatory rites, temples, and a stratified clergy. It was practised secretly for many years because of religious and political pressures, but currently enjoys relative freedom.

Possession is a central feature of Voodoo. It is the means by which the loa, or deities, interact with mankind. Through possession of congregants the loas enter the Haitians' world to punish and reward them and to treat their ills and worries. Because most serious illnesses are due to possession, either by evil spirits who must be forced out by the good loa or by angry loa who must be accepted by the patient, it is necessary, according to Voodoo theory, for the patient either to strive for possession or to calmly accept the temporary loa-possession in order that he be restored to health.

Possession occurs when a loa selects to 'mount' or 'enter the head' of his *cheval* (person possessed), thereby replacing his soul or *gros bon ange.* All thoughts and behavior are then attributed to the loa. Many of those possessed speak in 'tongues,' which are believed to be preferred by the loa. Some people, when possessed by Damballa, he snake god, perform extraordinary feats of agility, such as climbing down tree trunks head first. Others hold hot irons in their hands, chew broken glass, or walk bare-footed over hoi coals. Most people are amnesic for the period of the possession.

The quality of possession varies from one individual to another. Most hungan readily enter possession states for purposes of divining and curing through incantations, prayers, and symbolic offerings. Save for changed voice, posture, and facies, most hungans preserve keen awareness of the situational context and their role in it. They are able, alternately, to hold out the promise of help and to encourage fear through threats and the demonstration of awesome powers in animal sacrifices and magical feats. The other congregants frequently become possessed during ceremonies involving much danc-

ing, drinking, and singing, in an exciting atmosphere charged with an excessive barrage of sound, light, and drug stimuli. Their possession experiences, however, are marked by a greater loss of self-control and consciousness than is that of the hungan, and such experiences are indistinguishable from hysterical or dissociative behavior trends. Some patients strive for possession by praying and fasting before the ceremonies to increase the likelihood of being healed. Possession by the loa is manifested by a variety of patterns ranging from faints, trances, and glossolalia, to exhaustion. In some instances, sensory anesthesia allows the possessed to expose himself to noxious stimuli. If touched by the loa, an individual may only twitch, tremble, or make hand-fluttering motions. Failure to be healed or helped is attributed most often to lack of faith on the part of the sick, but sometimes to the presence of an enemy in the room. Such explanations of failure are related to the idea that the loa heal only those who are holy and who believe.

The particular manifestations of possession are undoubtedly dependent upon personal factors. The range of loa is large and many patterns are acceptable as loa-possessions, which accounts for the recognition of the loa-possession in non-Voodoo adepts such as Maya Deren, and for the frequent confusion of hysterical or psychotic behavior with possession.

We can only speculate as to the factors which produce possession. It would be of interest to know what part is played by incessant sensory stimuli such as the intense drum rhythm, which may have an auditory-driving effect on the temporal cortex, and to mow what effect alcohol and fatigue have on increasing individual susceptibility. It also seems likely that the contagiousness of excitement and the variety of emotions generated at the ceremonies (emotions which range from anger, confusion, and fear, to exaltation) may also lead to a breakdown of higher integrative central nervous system functions; but how, and to what extent, we do not know.

The ?avlovian theory of transmargina; stimulation and inhibition, according to Sargant, explains the different possession experiences as varying types of responses of the central nervous system to excessive stimulation. Thus, excess stimulation may, at first, lead to a state of hysteria. With further transmarginal inhibition comes excitement, inhibition of judgment, and various forms of stupor, tremors, writhing, and the like. In some, total inhibitory collapse occurs, particularly where there is a total disruption of previous conditioning or of recently acquired abnormal patterns, and with recovery there ensues a natural return of healthier patterns. While this theoretical explanation has much merit, more data is needed to adequately understand the mechanisms, the specific stimuli, and the individual factors involved in these processes.

It is clear that during ceremonies an individual's sense of selfidentity and self-awareness is reduced and that a sense of merging with the group is increased by the emotionally aroused atmosphere, with the group singing and clapping in unison to the ministrations of the hungan. Losing one's self-awareness and self-consciousness in this spirited assembly, which reaches its zenith in the possession experience where all ego defense and morbid dissatisfactions are transmarginally inhibited, would seem to

contribute to the therapeutic efficacy of the meetings; but how and why this occurs is difficult to say.

It is easier to see how the possession experience prepares the individual to accept the hungan's assurances of improvement and to follow his directions regarding ways of making more satisfactory adjustments. Experiencing the unusual psychic state of possession, which is associated with the reduction of usual defenses, induces the individual to seek to understand an experience which cannot readily be understood in common-sense terms. The cognitive dissonance engendered in the possessed, and in others witnessing their neighbors genuinely behaving as if in the control of outside forces, cannot fail to impress everyone with the validity of whatever theory is immediately at hand to explain the phenomenon, and with the abilities of the healer or hungan who has sponsored this visit from the loa.

It is important to recognize that the psychiatric patient who comes to the healer may be in a marked state of distress. Psychiyatric illness, irrespective of the culture in which it occurs, is humiliating, confidence-destroying, and anxiety-producing, in and of itself; particularly when the individual does not know why he developed the illness. In a culture where belie: in the development of illness is attributable either to wrongdoing or to violation of taboo, and hence to punishment by the gods, the sick individual may feel that others will see him as someone who has violated the taboos of the group, which in turn will make him fearful that his friends and family will avoid him and that he will be socially rejected. Or the individual may see himself as being victimized by someone to whom he has done a wrong, which also sets in motion a variety of anxieties. The illness may lead to an increase of anxiety, feelings of guilt with respect to other misdeeds, and the fear of being shamed.

With a loss of self-esteem and a loss of confidence in his usual manner of dealing with things, the patient is likely to become increasingly dependent on present situational stimuli and to turn, therefore, to acknowledged leaders and to others to find out what it would be best to do. The Voodoo belief system thus structures the situation for the anxious patient. In order to get help, the patient must be inducted into the Voodoo cult, perhaps to a greater extent than he had been prior to his illness. This necessitates his adopting a passive role, which in turn makes him more amenable to the suggestions of the healer. The hungan's power and omnipotence, coupled with the group pressure to conform, are especially influential on those who resist adopting this role. Indeed, the fear, the guilt, and the shame associated with nonparticipation may be more difficult to bear than those anxieties associated with the illness. Becoming a member of the sect, of course, guarantees the suppot *o* the group. By becoming possessed, the individual further demonstrates his faith in the hungan and in Voodoo.

In addition, there is tremendous pressure on the individual to get better. The individual cannot show that he doubts the hungan's power by not getting better. The pressure to improve is further intensified by focusing the ceremony on the patient. The congregation's attitude towards the patient assaults his identity as someone who is sick. His bad attitudes, his past performance, his past behavior, all are attacked and special

emphasis is placed on the fact that the individual has become sick through nonVoodoo adherence, such as violation of the taboos, or through forgetting the demands of the Voodoo loa. Guilt-induction acts as a punishment for his old behavior and relieves some of his guilt, even if he has not specifically done what he is said to have done. At the same time, he is rewarded for new behavior. He obtains social esteem, praise, and friendship by participating in the Voodoo church and by showing evidence of increasing involvement and commitment in it, particularly in the form of spiritpossession.

At the same time, the behavioral patterns institutionalized in the meetings are sufficiently broad as to provide suitable channels for the expression of a variety of needs and personality traits. For the depressed and guilt-ridden, the sin-cathartic basis of the ideology and ceremonies provides a useful guilt-reducing device; for the hysteric, a socially acceptable model for acting out; and for the obsessional and the depressed, the encouragement of a reduction of inhibitions and of an increase in emotionality. For accompaniments of neurotic and real suffering, such as feelings of inferiority, self-consciousness, suspiciousness, and anxiety, the social aspects of the movement would seem to be of value. For individuals experiencing either early or late symptoms of schizophrenia, the religious beliefs and practices offer culturally acceptable explanations for strange happenings within and around them.

All Haitians, including non-members of the Voodoo sect, agree on the efficacy of these methods for those sick individuals who believe in their value, emphasizing that belief in the healing ritual is crucial for successful results, although casual seekers after help often find relief as well. It is important to note that modern medicine and Voodoo healing are not thought to be mutally exclusive. Obtaining medical help with successful results is seen as confirming the efficacy of prayer and of God's power, and not as negating their value.

The healing occurs in a highly emotional and supportive setting and is inextricably intertwined with the themes and activities promoting possession and participation in ti e sect. Having seen or heard of the workings of the loa in previous meetings, individuals are likely to have faith in .he leader and a positive attitude towards anticipated results. Possession, thus, not only offers an opportunity for the expression of much repressed and suppressed feeling and thought, but is also a useful device for demonstrating the validity of the Voodoo system of beliefs and tor maximizing the individual's acceptance of a newer, healthier role in the community.

As in other forms of naturalistic, rational psychotherapy, the supplicant or sufferer relies on the group, as well as on the leader, to bring relief; and favorable expectancies are created and reinforced by the religious setting and the familiar patterns of cure. The group and the healer both have faith in religious healing and faith in the sufferer's ability to respond to healing. The connection of treatment with the dominant values of the group further increases therapeutic potentia and enlists the valuable support of the congregation, which further reinforces the sufferer's faith in cure. In this setting, where the emotional, attitudinal, and interpersonal aspects of illness are emphasized

and where all members share the same notions of treatment, the potentially therapeutic elements of religious behavior are boldly underlined.

The Zar Cult in South Iran

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Zar is a possession cult devoted to healing, and has been previously described ir Ethiopia, the Sudan, Egypt, and some parts of Arabia. The motive for joining the cult is to be cured of Zar sickness, an ill-defined condition, generally characterized by apathy, withdrawal, and sometimes by excitement and homicidal impulses. In some instances, physical diseases and repeated accidents or misfortunes may also lead a sufferer to the Zar cult.

Several writers have pointed out that Zar is a means of coercing the patient's relatives to give him what he wants, for if the Zar spirit is not appeased he will continue to cause the patient's sickness or damage those who refuse to supply the sacrifice.

In this paper, I wish to draw attention to the fact that Zar occurs also in Iran; to discuss the Persian origin of the name 'Zar,' and to describe certain unusual features of the cult as it is practised in southern Iran. In addition, the question of the historical migration of Zar will be discussed.

The observations described here were made chiefly along the south coast of Iran, particularly in the town of Bandar Abbas, in 958. The area about Bandar Abbas is today isolated, parched, and hot. The city itself is situated on an isthmus located at the southeast end of the Persian Gulf. There is a range of mountains in the northern and the northwestern parts of Persia, which stops the warm winds that come from Arabia, but in the south and east there are no mountains and the hot, moist winds, the 'Shaljee,' as they are called, turn the area into an inferno. This part of Iran is, today, virtually isolated from the rest of the country. In former times, when Bandar Abbas was of importance because it inked trade routes of Europe w th those of the Far East, several roads radiated from it to the other important Persian cities. Today, the roads have been abandoned and there is a vast and sandy wasteland separating the harbor from the main part of Persia. To drive from Lahr to Bandar Abbas might take two months, not because of the distance involved, since the distance is only 240 kilometers, but because of the poor roads and the unfavorable climate. When it rains the desert becomes a sea of mud, and wide rivers cross the roads preventing trucks from passing.

In the sixth century, the Persian Gulf, and in particular Bandar Abbas, was a major Eastern terminus for a rich maritime trade that flourished between Iran and India and China. The ports became richly cosmopolitan with representatives from many cultures and from many modes of life. In the Islamic era, after the eighth century,

the importance of Bandar Abbas increased. Islamic domination of the Mediterranean forced the Western powers to circumnavigate Africa to reach the Indian Ocean and China. In the beginning of the sixteenth century, the Portuguese became aware of the Persian Gulf, and invaded the harbor and islands of Kisham, Hengum, and Homourz. Alphonso d'Albuquerque, a Portuguese viceroy who conquered India, landed on Kisham Island. Among his crew were many African Negroes, presumably transported from the southeast coast of Africa. In 1598, King Abbas, with the help of Sir Anthony and Sir Robert Shirley, burned the Portuguese vessels and forced the Portuguese to eave the Persian Gulf; however, some African Negroes and Portuguese sailors stayed behind. These African Negroes, with their religious beliefs and their culture, were scattered along the southern coast of Iran, especially in Bandar Abbas. The Portuguese intermarried with the local natives, but the Negroes lived in relative isolation. It is among the Negro population that Zar is most popular and among them that it most probably originated.

The origin of the name 'Zar' is of some interest. In Sanskrit, the origin of the word is *'Jera,'* meaning 'handicapped'. It is used in Avesta in the same manner. The word 'Zar' is used in both old and modern Persian: as a suffix, Zar refers to 'a place of plenty'; as an adjective, it means 'handicapped, weak, and thin'.

Zar also means 'mourning and crying'.

I can determine, is Persian, even though the cult apparently originated in Africa.

I met one of the local healers, Mr. Morady, a Negro. In local language they cal; him *'babaye-Zar,'* which means 'the father of Zar'. He appeared to be very keen and shrewd; he tried to avoid questions and gave vague and ambiguous answers. The father of Zar sometimes calls himself 'the catcher of Zar' and claims that he is able to solve personal and family difficulties, romantic and marital frustrations. The majority of the natives believe that in most instances he is successful. At first, Mr. Morady promised that he would allow us to attend one of his ceremonies; however, the next day he said that he would not receive us. Apparently, he was afraid that we were government officers, because recently the government had outlawed the practice of Zar and now Zar healers were obliged to work in secret. Therefore, we had to depend entirely on the fragmentary information that we gathered from the natives.

Zar appears to be a complex disease-entity, with its particular symptomatology, which the fathers of Zar have been treating since its beginning. It is common practice that when the pat ent refers himself to the father of Zar, the latter arranges a ceremony for him; if the patient becomes unconscious dur ng the ceremony, the father of Zar says the patient is afflicted by Zar; otherwise, the patient must go to a Western-style doctor. In this way, the father of Zar tests his patient's responsiveness to the ceremonies of Zar and can predict the outcome of treatment. This preliminary exercise implies that the father of Zar is not able to cure all diseases. It also indicates that those patients who are treated by the father of Zar are suffering from disorders which are most likely psyciogenic. It is interesting to note that the patient who is diagnosed as being possessed by Zar will not respond to any treatment administered by a Western doctor.

Not only do they fail to respond to medical treatment, but in many cases they become worse. If a doctor gives an injection to these patients, they become extremely manic or withdrawn. In the native dialect, they say that Zar and the needle are not compatible, and that the more you give injections the worse the patient becomes.

Generally, the patient is withdrawn, sits silently gazing into space, refuses to eat and to carry out his daily activities, and at times he cries silently. Sometimes the patient does exactly the opposite, in which case he becomes combative, aggressive, and runs through the town; on occasion, a patient has been known to kit someone.

The patient is btought to the father of Zar, w ho asks for two dollars and a handkerchief which must belong to the patient and has been used by him. The two dollars is for buying candies and other sweets for what they call 'inhabitants of the earth': that is to say, 'genies'. (There is a fear of calling genies directly by name.) The father of Zar puts the patient's handkerchief under his pillow, with the idea in mind that the inhabitants of the earth will tell him, in his dreams, the reason and the cause of the patient's illness. The next day, the patient goes to the father of Zar to get the answer to his problem. The father of Zar might rule out the possibility of Zar by telling the patient that the inhabitants of the earth have told him the reason and the cause of his problems. The most common causes are the following:

1) The patient is possessed by the inhabitants of the earth because when he was a child he sucked milk from the breast of a Negro woman. (This explanation is given to a white patient.)

The inhabitants of the earth caused the patient to suffer because a few years before his illness he poured boiling water on the ground without saying *'besm-mel-lah,'* meaning 'in the name of God'. As a result, one of the genies' children was burned and the parents are now taking revenge upon this patient.

(There are other reasons for the inhabitants' becoming enraged with a human being and for their taking revenge whenever they get. hurt by a human. Genies can take the form of humans and become visible, and when hey do they become sly and deceive human beings; for example, having sexual intercourse with genies might afflict a person with Zar, although the person might temporarily marry a genie. However, the ultimate significance of genies and their relationship with man is not quite clear. In general, they can cause troubles for humans when they are hurt, out of ignorance, or through open hostility.)

The patient is not nformed as to what he should do to appease the genie's wrath. The father of Zar has to conduct ceremonies to 'bring the genies to talking' and. then the genie will tell him the exact nature of the penalty which the patient must pay for his ignorance or hostility. The father of Zar will make an appointment, usually on Wednesday, Friday, or Saturday nights; the appointment must be at night. The day before, he will inform all Zarees to attend and participate in the ceremony. The Zarees gather at his house; there is one singer, two drummers, and one pipe player.

The Zarees, who are usually Negroes, sit in a circle on the floor. The take off their shoes before they come into the ceremonial room and all the people who participate

in the ceremony, the Za ees and the foreigners alike, should be clean religiously. If a foreigner wants to participate in this ceremony, he must follow the example set by the Zarees. (This brings out another aspect of the ceremonies of Zar; namely, their attachment to Islamic tradition. One should bear in mind that all these people, including the Negroes, are Moslems. The concept of genies is an Islamic concept, and the Koran frequently refers to them as 'creatures of God'.) After the participants of the ceremony are seated in a circle, and every man and woman has been seated in his or her place, a place is made in the middle of the circle for the patient, the father of Zar, the singer, the drummers, and the pipe player, here are, also, tea and pastries, a brazier burning with charcoal, and special herbs which they pour into the fire to make it fume with a strange scent.

The ceremony starts when the sun goes down. The patient sits

in the middle of the circle and the father of Zar sits in front of him; the brazier of burning charcoal is between them, and on both sides of the patient are the drummers, the pipe player, and the singer. The ceremony begins with the slow beating of the drum and the singing of specia refrains. The drummers and the pipe player accompany the singer. The usual refrain is as follows: *'Qam-dari-baba'* or *'Zar-dari-baba,'* which means, 'You have sadness, dear one,' or 'You have Zar, dear one'. The word *'baba'* means 'daddy'. (In these areas, as well as in other areas of Persia, it is customary for the father, when he feels very loving towards his son, to call his son *'baba'*. This is also true with respect to the mother; she calls her son 'mother' or *'mader'*. This shows that the father of Zar establishes a very close and enduring relationship with his patient.) Essentially, this refrain is on the same scale as some of the rhythms which are used for the mourning of martyred saints. On first hearing the captations, it is very hard to distinguish the words. To a certain extent, there are no particular words and the 'song' is usually made up of mimetic sounds, but now and then one may recognize a Persian or, more often, an Arabic word. Following this music, the rest of the participants who are sitting around the patient start to move their heads and necks in a rhythmic way, following the rhythm of the cantation.

From this slow start the rhythm becomes gradually faster and more powerful. It is a common and frequent occurrence for the participants of Zar to pass out, one by one, and fall to the ground. Sometimes, the ceremony takes from three to four hours and during this time everybody is constantly shaking and moving. The end of the ceremony coincides with the patient's loss of consciousness. Once this happens, the treatment begins; the musicians stop their playing and the participants become silent.

The father of Zar starts speaking, addressing not the patient, but the Zar spirit who has possessed the pat ent. The idea is that Zar inside the patient speaks through the patient.

The answer which the genie gives and the price which he asks for his forgiving the patient are very interesting. Usually, the adolescents or young adults talk about a boy or girl for whom they have a romantic attachment, or they may confess that they have been let down by their lovers. Sometimes they ask for worldly goods, and sometimes

the request is a magical one, like asking for a castle of gold. The remedy consists of giving the genie what he wants. This gift is usually given to the patient. At times it is impossible for the father of Zar to fulfill the genie's wish and to pay the price for forgiveness: for example, the request for a castle of gold. To deal with such cases, the father of Zar has artificial castles and jewels made by hand, and these he gives to the patient instead of real ones. There are other wishes which are more pathologic in their manifestation; for example, the genie might ask the father of Zar that the patient be beaten with a bamboo stick a hundred times, and the father of Zar will beat the patient. During this performance, the patient does not usually complain, but simply endures the beating. The patients who ask for punishment are usually sailors who go out sailing for a month and return directly to the father of Zar. They give a good proportion of their earnings to him so that he will beat them one or two hundred times with a bamboo stick. In the native dialect, they call these sailors 'addicts,' i.e. addicts to the father of Zar's bamboo stick.

In summary, it seems that:

a) Zar is looked upon as a disease entity. Its clinical symptomatology and its social characteristics are known to the native.

b) Zar is considered, at the same time, a healing process. There is no distinction in the father of Zar's mind between the healing aspect of Zar and its clinical aspect. He considers the whole thing one entity.

c) Zar seems to be a safe means of expressing inner feelings without shame or guilt. It is quite obvious that the participants in the Zar ceremony can listen to the wishes of the patient without being embarrassed and without feeling hostile towards him.

d) Zar appears to be a form of attaining social-identity. This identification gives a sense of security to the members of the cult. In every aspect of their interaction with the people who do not belong to the Zar cult, the Zarees boast of their special spiritual attainment, the power of the father of Zar, and the grave consequences that befall any person who does not respect the ceremony of Zar and its tradition. There are two chief elements in this warning: that the person who rebels against the Zar tradition is apt to be afflicted by it; and that Zar itself is such a formidable and destructive power hat one should avoid it. In other words, they say, "Don't laugh at us or you might become one of us," implying that they obtain security from going along with this formidable and destructive power, but also that they fear it and suffer much under its oppression.

Possession Cults and Social Cybernetics[1]

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In attempting to explain the psychotherapeutic effects of possession states, most authors have emphasized only those features which are therapeutic for the individual possessed. Mischel and Mischel (1958), for example, list the therapeutic effects as resulting from (1) the attainment of high status through a cult role, (2) the acting out of aggressive and sexual behavior, (3) the reversal of sexual roles, and (4) the temporary freedom from responsibility for actions. This emphasis on the individual is, it seems to me, too limited. While admitting that cathartic and release effects are important, I will attempt to show in this paper that there are wider therapeutic effects which are more appropiately discussed from the combined points of view of both social psychiatry and the recently developed science of cybernetics.

My present remarks are based on eighteen months' field work with the Yoruba of Nigeria, during which time I explored traditional methods of treating psychiatric disorders; I studied some forty-five healers and sixteen t 'eatment centers in the vicinity of Ibadan in the Western Region. As my investigation progressed, it became clear that Yoruba possession cults played an important part in the management of psychiatric disorders. There was, however, a significant divergence between the healer's view and my own as to what was therapeutic about cult activity.

I held the conventional view that therapeutic effects were derived chiefly from the psychic experience of being possessed and were restricted to the possessed individual; but from the healer's viewpoint it is the joining of the cult and the carrying out of ritual behavior (sacrifices, processions, etc.) within the cult that is therapeutic. Clearly, the Yoruba do not regard spirit-possession as more therapeutic han other, non-cathartic forms of involvement. Moreover, the therapeutic effect is not even restricted to the individual who joins the cult; his lineage and the entire community may benefit. When an individual falls ill, divination may direct not that the patient himself become a member of the cult, but rather that some other member of the family do so. Regarding possession states themselves, the important thing, in the healer's eyes, is that the possessing spirit may prophesy for the group; the spirit may warn against certain evil practices and may direct family, cult group, and the community in general to behave in strict conformity with custom.

The following case histories will illustrate the healer's viewpoint. I will use as examples devotees of the *Sopono* cult, the cult of the smallpox gods who play a prominent role in the Yoruba pantheon. *Sopona* is the generic name for this family of smallpox spirits, but the diseases caused by the *Sopona* family are of much greater diversity than is included in the Western designation of the term 'smallpox,' and include many fevers (particularly with delirium), rashes, carbuncles, boils, and psychoses. The *Soponos* usually attack individuals whose family histories involve the previous worship of *Sopona* deities; they may, however, attack others who are so rash as to whistle (whistling attracts the Soponos) or to walk in the noonday sun, especially in the dry season. The cult was outlawed by the British government because of the part it played in the spreading of smallpox, but it is still very active in many parts of Yoruba land.

Case 1: A. was a thirty-two-year-old farmer. He had formerly been Christian, but was now pagan and a worshipper of *Sopono.* I saw him in a native treatment center in Abeokuta. He had recovered from his psychosis and had been with the healer for thirteen months. Before coming to his present healer, he had been treated by several others; indeed, the illness had started when he was about the age of fifteen. He described the onset and course of his illness as follows :

> It started after I went to the farm. I felt my body was very hot and something scratched my body. When I returned back to the village, I was running about and they had to get hold of me. I was sleepless and restless and talked irrationally. I was driving people away with a whip and a cutlass, and that's why they had to take me to a native doctor. I heard voices and saw spirits. I saw one carrying a club and he said f had neglected him and that I should go back to him. I paid no heed to the spirit, but in spite of that I got better a bit; but then after I would go home my sickness would relapse and I would have to go back to *Sopono* and it was when I started this that I got fully better. The thing is that my father worshipped *Sopono* and it was in our family. I used to worship *Sopono* but then I neglected the *orisha* [a class of minor deity 1 and became a Christian and for some time preached with the *aladura* [Christian prayer healers]. *Sopono* attacked me. It would not go off from me until I returned. I do not get possessed during the *Sopono* festival. I got possessed once during the initiation, but never since that time; it is only women who get possessed at the time of the festival; the women are not able to enter the shrine to sacrifice, but only the men.

his man remained well during the year that I observed him. In discussing his case with the healer, I discovered that the healer regarded the patient's return to the *Sopono* cult and his active participation in it as the therapeutic factor in his recovery. The patient was possessed only once, at the time of his initiation several years before. The healer confirmed, as did the elders of the *Sopono* cult, that it is the female members of the cult who undergo regular possession, whereas the male initiates perform other functions in the cult. They were quite certain that possession is no more therapeutic for the women than the other ritual is for the men.

Case 2: The following account was given by an elderly priestess of the *Sopono* cult in Abeokuta :

> If a woman is barren and comes to *Sopono* and prays for a child and if a child comes, the child is initiated at the age of four or five years. If they didn't initiate the child, *Sopono* would worry him. He would get sick and run off into the bush as if he were mad. Jf he is initiated at this early age, he will not get sick. The sickness may be madness or the man may talk

> irrationally, or *Sopono may* tie him down so that he will not be able to get up and walk. No medicine will take effect until after he is initiated.
>
> I myself inherited the *orisha* from my mother's father, who came from Dahomey. The sister of my mother's father was sick. She was crazy and ran into the bush and when they divination deity], he said unless she was not be well. Moreover, she would not family would be initiated. She was not the children's children behind. On that initiated. In our lineage any newborn immediately.

When I asked the priestess how the fact that other family members joined the cult could influence the mental health of her relative she seemed puzzled. It was clear that she did not share my view that the possession state itself was the important therapeutic factor. In her eyes, the recovery of good health resulted from the patient's behaving in accordance with the dictates of the *orisha* and possession was simply one small element in the total submission to the *orisha's* will, an element, moreover, which in itself had no special therapeutic effect.

The preceding considerations and case histories are obviously at variance with prevalent theories concerning the therapeutic effects of possession states. Of course, we might say that the cult leaders and healers are mistaken and that therapeutic effects derive solely from the catharsis, the improved status, etc., that are associated with membership in the cult. On the other hand, I should like to point out hat social psychiatry provides us with a comprehensive model of the relationship between psychiatric disorders and social structure, and that this model may be useful in providing a more satisfactory explanation of the phenomena described in the case histories above.

Social Disintegration and Psychiatric Disorder

For many years, sociologists have held the view that psychiatric disorders, antisocial behavior, and other types of social pathology are related to disruption of the social system. Burgess (1955), for example, writes :

> Areas which have high rates of disorders and social problems are those with the lowest degree of social organization. Those areas with low rates of mental and social problems have the highest degree of social organization. For example, the proportion of people participating in voluntary associations is highest in neighbourhoods with a low rate of admission to mental hospitals and lowest with a high rate of admission... Local community organization in areas where it is absent or feeble is therefore an essential way to mental health.

Leighton and his group (1963) have carried out extensive studies on the relationship between social disintegration and psychiatric disorder. As indices for social disintegration Leighton includes: lack of leadership and followership; inability to arrive at group

decisions; the paucity or total absence of formal groups; faulty communication; and, an increase in secularization. He has produced evidence that communities marked by such features have higher rates of disturbance than more integrated communities. Furthermore, he has shown in at least one community that when a neighborhood passes from a state of disintegration to a state of integration an improvement in community mental health results (Leighton, 1965).

With this theoretical background, I would like to suggest that one of the functions of possession cults is to provide a tightening of the social structure. Corroborating this suggestion is the following series of events, which I have observed on a number of occasions among the Yoruba. First, a village will generate an increase in social pathology: there will be an increase in the number of divorces, witchcraft accusations, and psychiatric disorders. Second the diviner will be consulted and he will diagnose the cause to be the failure of people to take proper care of traditional shrines and to take part in the annual festivals and other ritual behavior. Finally, he will direct the community to take more interest in their family *orishas,* to begin to sacrifice to them, and to refurbish their sacred groves and shrines. We have here an increase in social pathology which leads the diviner to prescribe an increase in religious behavior, which in turn results in an increase in social contact, an increased strictness in abiding by taboos, a consolidation of ineage relationships, etc. If the theory linking social integration to mental health is correct, then this activity on the part of the diviner and the community should decrease the incidence of social pathology. The following excerpt from my field notes is relevant. This account was provided by a prominent diviner of Ibadan :

> When there was great confusion in the town of Ibadan at the time of the Adelabu riots, the Olubadan, the king of the town, called on the Christians to pray and the Moslems to pray. A cow was slaughtered by he Moslems but the trouble got worse. Finally, the *babalawos* [traditional Yoruba diviners] were summoned. When arrangements were made, the king sent a messenger to the *Sopono* cult and to all the other *orishas* to come to the pa ace where they cast *ifa* [the principal Yoruba divination technique]. Six *babalawos* recited the *odus* [the verses used in the *ifa* divination procedure]. When they came to the point to show the cause of the terrib, e trouble in the town, *Ifa* said that the reason was that the people of the town did not care any longer for their old gods. The shrines were all in ruins. The people did not attend the annual *orisha* festivals and the spirits were not allowed to descend and prophesy to the people and warn them about their behavior. If they wanted peace in the town they must sacrifice to all the *orishas;* he-goats to *Eshu,* dogs to *Ogun* rams to *Shango,* and sheep to *Obatala.* Then they consulted further to see who should carry the sacrifice to the sixteen crossroads of the town. This done they went and delivered the message to the king. All Ibadan accepted what was said by the *babalawos.*

> An appointed day was made for the money to be brought. When the money was brought it was shared among all the *orishas.* The chiefs and councillors gave authority that all the markets would be closed on that day. Most of the villagers came into the town to sacrifice to their *orishas.* They all came to the king's palaces and promised to serve the king and their *orishas.* They put the sacrifices at all the main crossroads of the town. All the people took more part in their cults. After that time there was peace in the town once more.

Evidently, the revival of neglected religious practices and a general tightening of the social structure resulted in the restoration of mental health in the community. Thus, the efforts of the diviners and the activities of possession-cult members clearly fulfilled a significant therapeutic function for the community as a whole.

Possession Cults and Cybernetics

Having considered a number of specific case histories, let us to a consideration of ideas somewhat removed from the field of social psychiatric theory.

'Cybernetics,' a name coined by Norbert Wiener (1948), designates the science of communication and control. The central concern of this science is with the automatic regulation of machines and organisms in changing environments. Most of man's primitive machines and automata were not designed for automatic regulation; they were 'closed-loop' affairs with no linkage with the environment. As Wiener (1954) writes:

> Let us consider the activity of the little figures which dance on the top of the music box. They move in accordance with a pattern, but it is a pattern which is set in advance... The figures themselves have no trace of communication with the outer world, except this one-way stage of communication with the pre-established mechanism of the music box. They are blind, deaf, and dumb, and cannot vary their activity in the least from the conventionalized pattern.

Perhaps one of the earliest machines with some measure of automatic control was the windmill. The vane automatically swung the head of the mill in the direction of maximum wind pressure so that maximum energy could be derived.

Contemporary machines may, of course, have highly elaborate automatic control systems, and living organisms possess a host of such systems. Some of these are homeostatic; for example, warm-blooded animals, through a kind of thermostat arrangement, maintain relatively constant body temperatures. Other, more complex systems not only assure the maintenance of certain 'settings,' such as temperature or pH level, but also permit responses to unique environmental features so that there is not only a maintenance of the *status quo* but also an appraisal and assimilation of new features. The voluntary motor system is a good example. To quote Wiener again :

> If I pick up my cigar, I do not will to move any specific muscles. Indeed in many cases, I do not know what these muscles are. What I do is turn into action a certain feedback mechanism; namely, a reflex in which the amount by which I have failed to pick up the cigar is turned into a new and increased order to lagging muscles, whichever they may be. In this way a fairly uniform voluntary command will enable the same task to be performed from widely varying initial positions, and irrespective of the decrease of contraction due to fatigue of the muscles.

But, to return to the initial heme of my discussion, how are these considerations related to possession cults and societies? I would like to suggest that the combined effort of Yoruba diviner and Yoruba cult group functions as a kind of homeostatic mechanism to maintain the organization and coherence of the community at an optimum level. An increase in pathology stimulates heightened diviner-cult activities, which in turn promotes an increase in social cohesion, organization, and communication. Periods of relatively stable social organization are characterized by a diminution of religious activity.

We might speculate that so long as the degree of disorganization does not produce an overwhelming amount of social pathology, these traditional cybernetic mechan sms can cope satisfactorily (and presumably some cultures have more highly adaptive structures than others). But what about circumstances in which these traditional structures are overwhelmed; for example, when primitive cultures are inundated by Western technology with its train of disruptive forces? It is perhaps in these circumstances that new prophets and sects emerge. As Lanternari (1963) has shown, these cults and prophetic messages usually contain elements both of the traditional culture and of Western culture. The possession cults provide focal points of intense social activity, activity in which such new social compromises are forged. In this way, cult groups may sometimes function as portals of entry for 'new spirits' when such deities first appear in the community.

Conclusion

In the past, great emphasis has been placed upon the interpretation of possession states as techniques for individual psychotherapy. No doubt such interpretations do succeed in accounting for the therapeutic effects observed in individual devotees (though the extent of these individual effects has never been adequately studied and further work in this problem is clearly necessary). In theory, at any rate, the integration of the patient into the closely knit cu t group, the increased status bestowed through being chosen by the deity, the acti ng out of the sexual, sadistic, masochistic, or oral aggressive fantasies, the genera loosening of inhibitions, and the 'depatterning phenomenon' (suggested by Sargant, 1957) are no doubt of therapeutic value. Important also is the entire possession procedure, in that it is a tangible manifestation of supernatural in-

tervention in community affairs; it provides a powerful impetus to belief, an element of paramount importance in any healing technique.

In this paper, however, I have drawn attention to the broader therapeutic function of possession states by using a model borrowed from social psychiatric theory and from cybernetics, rather than from those areas of study concerned with the behavior of the individual. I have suggested that when an increase in social pathology occurs in a Yoruba community (riots, marriage breakdowns, psychosis, etc.), a self-regulating, homeostatic mechanism is brought into play. Through the diviners and the network of *orisha* cults (for which the diviner acts as the integrating principle), the community social structure is tightened; there is a return to the worship of traditional gods, the gods once more speak through their 'mounts' and direct a return to the customary practices, lineage contacts are increased, and there is a reaffirmation of group solidarity and a renewal of communication with ancestors and deities. I suggest that this interpretation of the function of possession cults is very much in line with that of the Yoruba cult leaders and healers themselves, and, at the same time, is an interpretation which confirms, even in our own eyes, the therapeutic and prophylactic value of possession-cult activity.

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The Religious Meaning of Possession States (with Indo-Tibetan Emphasis)

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The very formulation of this paper's title leads to recognizing the inadequacy oi certain amous works which ought to have contributed but do not, to the topic. There are no relevant observations in Durkheim's *The Elementary Forms of the Religious Life,* Levy-Bruhl's *The Soul of the Primitive,* Lowie's *Primitive Religion.* One can appreciate, in this respect at least, Radin's *Primitive Religion* even more, by contrast. Undoubtedly, the latter's treatment of possession states among the so-called 'primitives' stems from his insistence that we take account of differences among persons in terms of their religious intensity.[2] The primitive society as a whole does not undergo the possession state as a 'group soul'. Certain individuals, by idiosyncrasy or artificial stimulation of the psychic constitution become 'possessed'. Since it is a matter of persons, such possession states have a worldwide distribution; have taken place in the past, do so in the present, and will again in the future. The most authoritative work now available treating these states in their worldwide instances is, of course, Eliade's book on shamanism using the History of Religions approach, but not identifying the intimate states of shamanism and possession.[3]

The Meaning of 'Primitive'

Long ago Andrew Lang pointed out, "Nor can man be caught in a 'primitive' state: his intellectual beginnings lie very far behind the stage of culture in which we find the lowest known races."[4] My teacher of Sanskrit, Prof. Murray B. Emeneau, who established the Linguistic Department at the University of California, once told me that no primitive languages have been found anywhere on earth. The present low races are those far behind technologically, therefore disadvantaged in the equipment and professional training which we find essential for our way of life. Besides they have relatively pure traditions contrasting with our own complex, cross-fertilized intellectual heritage. The civilized and uncivilized groups with their several billions of persons are equally incapable of Edison's invention, providing modern electric lighting of homes among advantaged classes of mankind. By the same token, archaic times had no monopoly on savagery and butchery, as one great progressed nation of today has demonstrated

[2] Paul Radin, *Primitive Religion; Its Nature and Origin* (1937; Dover reprint, 1957), pp. 9–10.

[3] Mircea Eliade, *Shamanism; Archaic Techniques of Ecstasy,* tr. from French by Willard R. Trask, Bollingen Series LXXVI (New York, 1964), pp. 5–6.

[4] Andrew Lang, *The Making of Religion* (London, 1898), p. 43.

with latest efficiency in cruelty. Unless the hearts of men will change, every nation can explode in colossal horror from the subterranean depths of sex and nutrition.

Sir Francis Galton made the pioneer investigations of human faculty, especially in the intensity of mental imagery compared with verbal thinking. Among the 'primitives' this imagery has a strength comparable to what can be found in our society among architects and painters, and generally among children.[5] The primitive person lives more in sensory objects; he has a much greater sensory acuity than the over-verbalized modern.

This brings us to consider the extent to which Gautama Buddha was 'primitive' when he left home behind, cut off his hair, and meditated for six years, especially by the river Nairanjana; or, the same regarding the Tibetans, preem nently Milarepa, who meditated for years in caves. Adopting terminology I have found in Buddhist Tantra literature, these yogins reach a 'non-discursive ecstasy' *(avikalpa-sukha)* in one or other of three main varieties, to wit, 'non-discursive ecstasy' from sound, form, or the tangible.[6] As I have studied this terminology, it refers to three mystic states of increasing primitiveness, or retreat from our normal discursive consciousness. It would be the difference between hearing the Lord (the commonest), seeing the Lord (much rarer), and touching the Lord (the rarest of all). The last case, 'non-discursive ecstasy' from the tangible is the primitive state analogous to dreamless sleep,[7] or to the caterpillar in the chrysalis.[8]

In short, the yogins do become 'primitive' through meditative attainment; but when hey talk about it later to their disciples, they return to the complexity and conventional symbols of their particular culture.

Besides, all mankind reduces to an identical denominator of 'primitive' by sex and nutrition. Thus the word 'primitive' can be properly applied to a state of being and to a type of indulgence but is misapplied to a society of persons.

For our purposes, the 'state-of-being' sort of 'primitive' is in point. Our foregoing allusion to three levels of ecstasy is a i formulation in psychological terms, and it is this very ecstasy which Eliade takes to be the essentia feature of shamanism, while arguing that this ecstasy does not require 'possession' by a deity.[9] If we favor this view, we should also notice the body of Upanishadic literature as constituting metaphysical speculations based on those primary experiences called the waking, dream, dreamless, and fourth states *(avastha);* and we should call the Upanishadic masters, the 'shamans'.

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[5] Francis Galton, *Inquiries into Human Faculty and its Development,* Everyman's Library (London: J. M. Dent & Co.; New York: Dutton, 1907; also edition of 1911).

[6] This is the terminology in Tson-kha-pa's *Snags rim chen mo,* introductory section, Peking edition.

[7] Cf. Louis Renou, ed., *Hinduism* (A Washington Square Press Book), 'The Soul in Dreamless Sleep', pp. 74–75.

[8] Tson-kha-pa, *Snags rim chen mo,* op. cit., *srin buhi tshul gyis*' by the method of worms (or caterpillars).*

[9] Mircea Eliade, "Recent Works on Shamanism; a Review Article," *History of Religions,* 1:1 (Summer, 1961), p. 153.

In agreement, ancient Buddhism discounted the service to deities and stressed an ethical and psychological cultivation. It employed experiential terms for the meditational discipline, e.g., 'calming of mind' *(shamatha)* and 'higher vision' *(vipashyana).* Nevertheless, the Buddhists said that by such mental training one would be reborn in the higher worlds, those called the 'realm of form' and the 'formless realm', and that these higher realms as well as the 'realm of desire', making up the three worlds, are all inhabited by different classes of deities, among whom the meditator could be said 'to dwell'.[10]

'Dwelling among' means, in Buddhist terminology, a concordance of sensory experience; and when the dwelling is among a class of deities, it implies a certain ecstasy, as previously stated, from sound, form, or the tangible. This may be illustrated by a sentence from the *Adhyardhashatika Prajnaparamita, a sutra* associated with the Yogatantra literature: "[The Lord as Mahavairocana] was dwelling in the palace of the King of the gods who are Paranirmitavashavartin ['dominated by the magical manifestations of others' throughout the 'realm of desire'.[11] To understand this remark, we should know first that this group of gods is one of the six classes of gods placed by Buddhist metaphysics in the 'realm of desire'. Also, each of these six classes is held to keep its sexual power intact while having sexual commerce in various ways. In non-tantric Buddhism, according to the analysis of Lin Li-kouang, the Paranirmitavashavartin gods, in common with the Nirmanarati gods, come to climax through mutual conversation, hearing of voice, and sensing of odor.[12] In a certain work of Buddhist Tantra, that description applies to just the Nirmanarati gods, while the ecstasy of the Paranirmitavashavartin gods is reached through mutua gazing, i.e., the 'non-discursive ecstasy' from form.[13] We may infer that when the Buddha is said to dwell in the palace of the King of those gods he has the comparable ecstatic sense experience but there is no suggestion of 'possession'. Indeed, the son of the god Mara, who tempted with a hideous and sensual display the future Buddha meditating under the tree of enlightenment, is the King of the Paranirmitavashavartin gods.[14] This ecstatic experience is localized at evening twilight.

If these Buddhist yogins could achieve such 'non-discursive ecstasies,' it should be apparent that while the terminology is Buddhistic, the experiences themselves belong to humanity, the potentiality of human beings. But, in fact, it is the experience of certain members of the human community, distinguished by their intensity of religious

[10] This is the standard doctrine of Buddhist Abhidharma texts; however, I happen to be taking these ideas from Tson-kha-pa's *Lam rim chen mo,* mchanbu edition, section on 'Training the mind of the middling person' *(skyes bu hbrin bio sbyon).*

[11] The title as entered in the Tibetan Kanjur is *Arya-prajnaparamitamaya-shatapanacashtika;* cited passage in Tokyo-Kyoto Photo. Reprint, Vol. 5, pp. 173–72.

[12] Lin Li-Kouang, *L*Aide-memoire de la vraie loi* (Adrien-Maisonneuve: Paris, 1949), p. 55.

[13] This is in Abhaya kara-pada's *Amnaya-Manjari* commentary on *Shri-Samputa-tantra,* 23rd Manjari, the Tibetan Tanjur. This formulation is fairly consistent with Louis de la Vallee Poussin, *L'Abhidharmakosha de Vasubandhu,* III, p. 164.

[14] Alex Wayman, "Studies in Yama and Mara," *Indo-Iranian Journal,* III (1959), p. 114.

experience, and, as explained by Eliade, "is preceded by the experience of the initiatory death" of vulgar sense perception.[15]

The Meaning of Possession States

Andrew Lang once wrote:

> In the philosophy of Animism, and in the belief of many peoples, savage and civilized, spirits of the dead, or spirits at large, can take up their homes in the bodies of living men. Such men, or women, are spoken of as 'inspired', or 'possessed'. They speak in voices not their own, they act in a manner alien to their natural character, they are said to utter prophecies, and to display knowledge which they could not have normally acquired, and, in fact, do not consciously possess, in their normal condition. All these and similar phenomena the savage explains by the hypothesis that an alien spirit — perhaps a demon, perhaps a ghost, or a god — has taken possession of the patient. The possessed, being full of the spirit, delivers sermons, oracles, prophecies, and what the Americans call 'inspirational addresses' before he returns to his normal consciousness.[16]

Except for his out-moded reference to 'the philosophy of Animism' and for his word 'savage,' which experience proves to not contrast with the 'civilized,' Lang's remarks could hardly be better stated as a point of departure.

Since Lang's time, an enormous literature has developed around observations of and theories about shamanism and possession. Eliade's recent views are stated in these well-considered words:

> Shamanism is inextricably related to phenomena of 'possession'. Some authors are even inclined to see in 'possession' the constitutive element of shamanism; consequently, they consider ecstasy (ascension, *descensus,* horizontal voyage) a secondary phenomenon. It seems difficult to us to accept such a hypothesis. It is true that 'possession' is an archaic and universal phenomenon, but we see no reason to draw the conclusion that the experience of possession preceded the experience of ectasy. On the contrary it is understandable how 'possession' could develop from an ecstatic experience: while the soul (or the 'principal sou") of the shaman was on its voyage in the higher or lower worlds, 'spirits' couid take possession of his body, t is difficult to imagine an inverse process; for, once the spirits have taken 'possession' of the shaman, the *personal* ecstasy — that is, his soul's ascension to Heaven or its descension to the netherworld — is precluded, in that

[15] Mircea Eliade, *Myths, Dreams and Mysteries,* tr. by Philip Mairet (London, 1960), Chap, IV 'Sense-Experience and Mystical Experience among Primitives, pp. 73–98, esp. 85–87.

[16] Lang, op. cit., pp. 139–40.

> case, it is the 'spirits' that entail and crystallize the religious experience by their 'possession'. Obviously, this priority of ecstasy [trance] in regard to possession is *of a psychological* order; we are not able to point out the exact *historical* moment when 'possession' was substituted for ectasy. Both types of mystic experience are 'primordial'.[17]

I wish here to yield to an authority like Eliade, and can add that there seem to be two kinds of persons involved. In the old Buddha meditation, typified by the Buddha meditating with crossed legs, the experiental ascension takes place without the whirling, dancing, drumming, and incanting ordinarily associated with the shaman. Non-tantric Buddhism stresses the rise to higher worlds while seated cross-legged, perhaps in conscious opposition to shamanistic techniques of voice and body. The Buddhist thesis of a 'body-made-of-mind' *(manomaya-kaya)* was elaborated in the *Lankavatarasutra* into three bodies-made-of-mind. The first is the mental body stabilized in the ecstasy of *samadhi;* the second, prevalent on the last three stages of the ten-staged *bodhisattva* path, proceeds to all the Buddha Realms; the third is natural to the class of Buddhas.[18] In contrast, tantric Buddhism engages in manipulations of body, speech, and mind, in ways especially associated with shamans. Thus, non-tantric Buddhism shows the procedure of ascension by wh ch one comes to dwell among the gods and to attain occult powers thereby, while tantric Buddhism has the procedures of inviting deities into the proficient in order to attain supernormal powers, and the latter constitutes 'possession'.

Returning to some of the theories advanced by researchers, their different standpoints involve both the attitude to the particular individual subject to the possession state and to the reliability of his prophecy.

Radin agrees with a widely held view (a view held especially by critical outsiders) that such persons are mentally ill: he calls them 'neurotic,'[19] (but is paradoxically sympathetic). Eliade reviews the thesis equating shamanism with mental disorder, called for arctic people the 'arctic hysteria,"[20] and concludes that the truth is somewhat different: "But the primitive magician, the medicine man, or the shaman is not only a sick man; he is above all, a sick man who has been cured, who has succeeded in curing himself."[21] Eliade's rather sympathetic treatment based on exhaustive research is borne out in the Tibetan case by Nebesky-Wojkowitz:

> Judging by the various accounts I have heard, most of the Tibetan mediums seem to experience their first trance at the time of puberty. The first fits occur spontaneously and mostly to the great alarm of the person who

[17] Eliade, "Recent Works on Shamanism," p. 155.
[18] Wayman, "Studies in Yama and Mara," p. 119.
[19] Radin, op. cit. pp. 9–10.
[20] Eliade, *Shamanism,* pp. 23 ff.
[21] Ibid., p. 27.

> experiences them, since only few Tibetans seem to feel inclined to become professional mediums, being afraid of the great strain and the pain which most mediums have to undergo during their prophetic sessions. These fits are, however, not ordinary cases of epilepsy as had been often assumed. The Tibetans are well able to differentiate between a person who suffers from epilepsy, and those cases in which a man or woman is supposed to have become 'possessed'. While in the former case medical help is sought, which goes in combination with the performance of appropriate ceremonies destined to appease or subdue those supernatural beings which are believed to send epilepsy, special measures have to be adopted in the case of 'possessed' persons.[22]

When such seizures are imbued with religious significance, they are interpreted as death of the ol d personality —- as depicted in the African scene by Verger's remarkable photo of the collapse,[23] — and followed by rebirth in a changed mode of being.[24]

The prophecies yielded through possession states have much in common with astrological predictions. The comparison occurs to me as a result of my research in India during 1963 on the history of Indian astrology. Both shamans and astrologers have the problems of competitors and clientele. The way the performer views the situation is contained in a shaman's actual sentence as cited by Radin: *"It is necessary to represent the simplest things as though they were the most complicated and it is only by the successful outcome of a treatment that they [the people} realize that I was right?"*[25] (Radin's italics). If a Hindu astrologer were frank, he could say the same thing. I learned in the fascinating country of India, where the astrology books are complicated beyond belief, that it is only necessary for an astrologer to be recognized for *one* correct prediction; his reputation is secure: he can manage his way through the other predictions. Both the astrological and the possession-state predictions require a good-will of the people, what William James called 'the will to believe'. Given this, the foibles and the mistakes can be explained away. Even more, since both posit an extra-normal communication with deity, and this requires special circumstances, a circle of well-wishers is held to enhance the ability of the performer and his chances of evoking a sound prediction. And for those two sources of predictions Radin's remark about spirits and deities applies: ' They have no meaning except in their relation to the life-values and economic realities "[26] Oi man.

Another approach to the possession state is in terms of the deities involved. In the rich demonology of India, certain ancient texts use the expression *gandharvagrihita,*

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[22] René de Nebesky-Wojkowitz, *Oracles and Demons of Tibet* (Mouton & Co: 'S-Gravenhage, 1956), p. 416.

[23] Pierre Verger, *Dieu d'Afrique* (Paul Hartmann Editeur: Paris, n.d.). Plate 14.

[24] Radin, op. cit., p. 109.

[25] Ibid., pp. 144–45.

[26] Ibid., p. 30.

which means 'caught by the Gandharva'. The Gandharvas were of different orders, but usually paired (as male musicians) with the Apsarases (a sort of undines). Their lower orders may well have been, respectively, the Indian counterpart of the dreaded incubi and succubi in European folklore.[27] Their higher orders constitute the celestial region to which the 'ecstatic' *(muni)* takes magical flight n a hymn of the *Rigveda?*[28] Anthropological research shows that shamans sometimes have the bride (Apsara) and groom (Gandharva) relations as special cases of tutelary deities. Eliade summarizes the recent findings on this and on other features of shamanism in India and Tibet, as well as in other countries.[29]

In Tibet the deities that possess the shaman are of higher and

lower orders, the various kinds of *'jig rten pa'i srung ma,* in the aboriginal Bon-po terminology.[30] Another word meaning 'skywalker,' used by both Buddhists and Bon-po is the rendition of Dakini, an Indic expression. The invocation by Tson-<ha-pa to his great reform of the tantras concludes with this verse:

> May the host of 'sky-walkers' of the orders 'field-born,' 'together-bom,' and 'incantation-bom' —
>
> Keeping me in mind kindly, like a mother her son,
>
> Grant the favor of all occult powers *siddhi)* and the pacification of all hindering demons.[31]

However, the number of tutelary deities in Buddhist Tantrism is enormous, and his goes to show the deeply engrained shamanism of India and Tibet.

The Religious Significance

Of the two religious forms, a god's revelation by oracular signs, and theophany, or the visible manifestation of divinity — both are found in abundance in the religious history of India and Tibet. Revelation here is especially the divine message of prophetic dreams; and theophany in the Indo-Tibetan tradition is preeminently the fruit of *yoga,* the evocation of deity by stipulated procedures of meditation, usually together with restriction of sex and nutrition. But these two expressions do not suffice for discussion of possession states; or for the variety of religious experiences. We need only consider the legend in India of Yama, the first mortal, and who showed the way to a heaven in the intermediate space — that he drank with the gods in the heaven he discovered and was tantamount to a god, but not positively a god.[32] The emphasis here is more on his

[27] Cf. A. C. Banerjea, *Studies in the Brahmanas* (Motilal Banarsidass: Delhi, 1963), pp. 134 ff.
[28] Eliade, *Shamanism,* pp. 407 ff.
[29] Eliade, "Recent Works on Shamanism," pp. 152–86, esp. 174–78.
[30] Nebesky-Wojkowitz, op. cit., p. 409.
[31] Tson-kha-pa's *Snags rim eben mo,* first folios.
[32] Wayman, "Studies in Yama and Mara," pp. 49–50.

own attainment of that heaven than on the gods with whom he drank. Understandably, specialists in the history of religion employ some other terms of more convenience to their purposes to account for the experiences that obviously fall in the category of religion and the sacred as contrasted with the secu ar and the profane.

Eliade uses the word 'hierophany': "The sacred, then, manifests itself equally as a force or as a power. To denote the act of manifestation of the sacred, we propose to use the term *hierophany...* The humblest hierophany and the most terrifying theophany present the same structure and are to be explained by the same dialectic of the sacred... The great mystery consists in *the very fact that the sacred is made manifest;* for... in making itself manifest the sacred *limits* and historicises' itself."[33] The same author borrows the word 'kratophany': "Every hierophany is a krarophany, a *manifestation of force."*[34] He further explains his position: "This tendency on the part of the hierophanic process to repeat the same paradoxical sacralization of reality ad infinitum is what, after all, enables us to understand something of a religious phenomenon and to write its history'."[35] Also, "The manifestation of the sacred in a stone or a tree is neither less mysterious nor less noble than its manifestation in a 'god'.[36]

When we limit the manifestations of the sacred to the possession state, it is special persons with whom we deal. Radin describes their religious experience this way: "And so, for the elect, it is quite conceivable that the original physiologically conditioned terror of the shaman became the *tremendum* of which the religious philosopher Otto speaks; that the desire for solitude and withdrawal from the world became his *mysterium;* and the hallucinatory experience of the trance, his *wholly-other,* the beatific vision of the mystics."[37]

This feature that a certain person, one of the elect, becomes a kind of funnel for sacred life force to pour into the profane world, is basic to the spiritual authority on which new religions are founded. And it is basic because it is primitive; after all, it is what has always happened. I should like to call attention to three illustrations in the history of Indo-Tibetan Buddhism.

The first case is the capital experience of Gautama Buddha under the Tree of Enlightenment. At evening twilight he is assailed by the King of the Gods that are called Paranirmitavashavartin, 'dominated by the magical manifestations of others'. The Earth Goddess comes to his aid and defeats the King of the Gods known as Mara, who had attained lordship in the world of desire. He goes on with other mystic experiences du ring that night and subsequently founds the great religion called Buddhism. In the commentarial tradition of the Yogatantra, the Earth Goddess is converted into

[33] Eliade, Myths, Dreams and Mysteries, pp. 124–25.
[34] Ibid., p. 126.
[35] Eliade, *Shamanism,* p. xvii.
[36] Idem.
[37] Radin, p. 160.

the Mother of the Buddhas Prajnaparamita;[38] and after she (a kratophany) defeats that King of the Gods, the Buddha takes the defeated god's place as 'hoider of the thunderbolt' (Vajradhara) in the hall of his palace 'Willow Leaves'.[39]

The second case is that of Asanga (4^{th}-5^{th} cent., A.D.), founder of the Yogacara school of Mahayana Buddhism. He prays to the *bodhisattva* Maitreya abiding in the Tushita Heaven to descend

to the floor of India, called Jambudvipa, and teach the Mahayana doctrine. The traditional account runs as follows:

> Asanga, Teacher of the Law, then prayed saying: "I now intend to make all beings fully believe in the doctrine of the Mahayana. I only pray thee, Oh Great Master to come down to Jambudvipa and propound the Mahayana in order that all beings may be fully convinced of it." Maitreya, thereupon, in accordance with his prayer, came down to Jambudvipa at night, flooding it with great rays of light, had a large assembly of those connected with [the law] called in a lecture hall, and began to recite the sutra of the Saptadasha-bhumis [the seventeen stages]. After having recited a passage he would explain its purport. The seventeen Bhumis were finished during the nights of four months. Although all were together in one and the same hall listening to the discourse, it was, nevertheless, only Asanga, Teacher of the Law, who had access to the Bodhisattva Maitreya, while the others could merely hear him from afar.[40]

Here, one of the elect, Asanga, alone sees Maitreya, by the second kind of ecstasy, derived from form; while the others can only hear Maitreya, so with the first kind of ecstasy, derived from sound. The very same hierophany serves for two different religious experiences. And a great school of Buddhism is founded.

The third case occurs in Tibet in the life of Tson-kha-pa (A.D. 1357–1419), founder of the Gedugpa, the 'yellow-hat' school of Tibetan lamaism. A singular incident occurs in the autumn of 1392, when he and the lama Dbu-ma-pa went into solitary seclusion near Lhasa. This lama Dbu-ma-pa had a rich inner life, involved with evoking tutelary deities, especially the *bodhisattva* Manjughosha, and of receiving spiritual communications. With this master's guidance, Tson-kha-pa proceeded with the 'service' and soon visualized concretely the face of Manjughosha; and with Dbu-ma-pa as interpreter, received answers to his questions on profound essential points of the doctrine. And he prayed that there be no separation henceforth between the tutelary deity and himself.

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[38] *Arya-prajnaparamita-naya-shatapancashatka-tika, by* Jnanamitra, TokyoKyoto Photo. Reprint ed. of Tanjur, Vol. 77, p. 44–4.

[39] *Shri-Paramaditika,* by Anandagarbha, Tokyo-Kyoto Photo. Reprint, Vol. 72, p. 184–3.

[40] Alex Wayman, *Analysis of the Shravakabhumi Manuscript,* Univ, of Calif. Publications in Classical Philology, Vol. 17 Berkeley, 1961, pp. 31–32, reproduced from J. Takakusu, "The Life of Vasubandhu by Paramartha (A.D. 499–569)," *T'oung Pao,* Ser. II, 5, 274–275.

Now Tson-kha-pa had the confidence to start his new school, and make his reform of the Tantras.[41] In this case, the lama Dbu-ma-pa is a kind of medium, or shaman of the North and Central Asia variety. He must have been in a shamanistic trance, and employing our earlier terminology, in the third kind of ecstasy, derived from the tangible; while Tson-kha-pa was in the second kind, derived from form. As before, the same hierophany serves for two different religious experiences. Again, by 'sight' of the deity, a great school of Buddhism is founded in Tibet.

It is not our problem to decide whether or not the trance experience is hallucinatory, as Radin puts it. The religious significance is indepencent of its being an hallucination or a reality. The hierophany is the same. Indeed, Radin's way of speaking involves a metaphysical standpoint. What one person calls an hallucination, another calls a reality. Again, when earlier we brought up the case of two different persons being involved, the one who meditatively ascends to the deity and the one who suffers intensely to be a medium of the deity, we may have also introduced a practical distinction that disappears in the kratophany itself. In the cults of Buddhist Tantra, the candidate was called the 'proper receptacle' *(snod run* in Tibetan). In the Kriya Tantra he generates himself into a deity, and generates the deity in front.[42] He thus enters the ranks of the Elect, to embark on the 'magical flight,' a terminology stemming from the institution of god-kings; and then appropriated by the priesthood after the divorce of ruling and priestly functions. In classical India, the flying *yogin* was called a *vidyadhara* ('holder of the magical science') and included in the retinue of the wind-god Vayu.[43] In Budd list terminology, it is the 'body made of mind' that takes this trip aloft to become initiated if it reaches the top stage, as 'King of the Law of the Three Worlds'.[44]

But while the religious significance is independent of whether psychotic states are involved, I might call attention to some primitive questions. One can go to sleep naturally, or by sleeping pills; but who claims the sleeping physiology is the same? One can dream naturally, or by drugs; but who claims the dream is the same? One can enter the dream state by meditation, or by falling asleep; who is so bold as to claim the dream is the same? One can see visions through fasting on the desert, and then converse normally with men; and one can see visions through delirium and converse abnormally with men. And who knows that the visions are the same? Did the researchers who judged the shaman trance states to be psychotic really know they were so by knowing what the shaman experienced? Or are these judgments made simply

[41] From my manuscript biography of Tson-kha-pa based on Mkhas-grubrje's biography of Tson-kha-pa.

[42] This is ubiquitous in Tibetan tantric practice, and the procedures are extensively set forth in F. D. Lessing and Alex Wayman, trs., *Mkhas-grubrje's Fundamentals of the Buddhist Tantras,* Indo-Iranian Monog aphs Vol. VIII (Mouton & Co., 1966).

[43] Wayman, "Studies in Yama and Mara," Table, p. 59.

[44] Terminology found in the commentary by Anandagarbha, op. cit. (note 38 above), in circa same place; also in *Mkhas-grub-rje's Fundamentals of the Buddhist Tantras.*

through skepticism of any abnormal powers of mind, refusing to admit those powers to anyone when the researcher himself lacks them?

Universal Religions View Possession States: A Panel Discussion

The idea for this panel discussion came from Prof. H. B. M. Murphy, who felt that in a society such as ours we should not avoid the issue of the conflict between the scientific and religious views of possession states.

The problem is this. Thus far in this conference we have assumed that native explanations of spirit-possession generally involve elements of fantasy, that there are, in fact, no such things as disembodied agencies which mount their devotees and cause them to behave in the manner we have heard described. We have tacitly explained away the spirits by regarding them as primitive interpretations of social, psychological, or physiological forces. I believe this attitude reflects the general view of our contemporary, middleclass populace.

Yet, in the sacred books and the dogma of the higher religions, which form one important root of our culture, the belief in spirits is clearly evident and is formulated in terms strikingly simi ar to those which we have heard used this weekend. There is God; there are angels and devils; and there is man. What attitude, then, is the contemporary Christian, Moslem, or Jew to take towards references to spirit-possession in his holy books?

Now this problem rarely exercises us in our day-to-day life in the Western world. But for some, the conflict between the scientific and the religious views of the spirit realm is very important. I refer here to the missionary who takes up a post in rural Africa or India, or in the West Indies. What attitude does he take towards possession states among the people with whom he works? If one of his converts wishes to join a possession cult to be healed, how does he view the matter? When he witnesses possession phenomena, how does he interpret what is happening?

These are the kinds of questions we have asked our panelists to discuss.

The Attitude of Catholicism Towards Possession States

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The existence of primitive religions in general, and of possession states in particular, has long been a cause of perplexity and hesitation among missionaries of Western Christianity. At least four different reactions to primitive religious beliefs are conceivable, and each has in fact existed.

The first and simplest attitude is to condemn all native beliefs and practices as the worship of false gods. Such a rejection can be readily expressed in the language of the Old Testament, and the temptation to use such traditional and authoritative forms of reprobation is very great. This attitude, however, is not easy to maintain as a part of a New Testament missionary policy. For a Christian does not believe in the actual existence of false gods; and if false gods do not exist, then obviously they cannot take possession of men's souls. Therefore, some other formulation must be employed to explain what, in the opinion of the missionary, really happens during the period of possession.

And so a second explanation is immediately pressed into service, an explanation which is also based on Biblical authority, and which is suggested by the orgiastic and sometimes immoral aspects of cult activity. One can assume that pagan cultists are, in fact, worshipping the Devil; and, on this assumption, one can explain possession states through reference to the presence of Satan (or that of his minions) and to Satan's control over lost souls. This interpretation has often been accepted in the past, and even today it is frequently encountered among the less enlightened heralds of the Gospel. However, it would seem to be an interpretation of dubious value, since it recognizes the factual existence and the dangerous power of evil spirits, and, in so doing, gives support to the very beliefs which the missionary is trying to eliminate. Obviously, a white man's belief in the Devil simply reinforces and confirms the native's trust in his own spirits and deities.

A third and more sophisticated interpretation is that of the tough-minded scientist, be he psychiatrist or cultural anthropologist, psychologist or comparative sociologist of religion. This third interpretation regards possession as a regressive symptom of the maladjusted personality, the victim of social frustration, at best, of pathological delusion, at worst. Such conceptions are to be found increasingly not only in scientific circles, but also among missionaries, though there is the uneasy feeling among more discerning missionaries that such rationalistic reductionism does not do full justice to the specifically religious factors in possession experience.

I would like, therefore, to suggest a fourth interpretation. According to this interpretation, possession phenomena are to be regarded as complex, overdetermined forms

of human behavior which must be understood and explainec at a variety of different levels. Taking into account this high degree of complexity, we must be prepared to examine all facets of possession experience. Problems of personality structure and cultural factors must be explicitly recognized, just as we have recognized them during this meeting. So too must social functions, both overt and latent, and also the therapeutic effects which are frequently a part of possession phenomena. Along with all of these factors, the possibility of authentic religious factors must also be considered. In some cases at least, and perhaps in many, the possession state is simply concrete expression of a subject's honest and earnest attempt to establish a meaningful and personal relationship with ultimate values, such as he conceives them. Indeed, this is often his explicit intention when he undertakes to participate in possession-cult activities. Apart from religious factors, the less commendable aspects of possession experience should also be discussed, including those factors detrimental to mental health and those which involve moral dangers, not to mention those which involve erroneous beliefs concerning the supernatural. (In this connection, a gradual re-education of pagan cultists could be undertaken, a re-education that would safeguard their commendable religious motivation and, indeed, reinforce it, while at the same time eliminating pathogenic conditions and encouraging more mature forms of worship and spiritual development.) On the whole, this fourth alternative seems a more balanced and comprehensive approach to the problem of interpreting possession phenomena, since it gives more explicit recognition to the complexities of human motivation. And yet, this is only a preliminary suggestion and, as such, remains open for discussion.

The Attitudes of Catholic Missionaries in Eastern Nigeria

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I would like to begin by emphasizing the fact that the contemporary attitudes of the major religions towards possession states in primitive societies vary widely. Among Catholic missionaries, for example, such attitudes are not clearly defined and the individual missionary is influenced by his own cultural background as well as by the setting in which he works.

In the following paragraphs I will undertake to describe some attitudes towards the traditional beliefs of the Anang Ibibio of the Eastern Region of Nigeria. (My observations are based on one year of general practice in a mission hospital in a remote area of the Eastern Region.) The Ibibio are deeply rooted in animistic beliefs; they are surrounded by both supernatural and ancestral spirits, and may be possessed by either. Their homes and roadsides are cluttered with shrines, dolls, masks, amulets, and

charms which the spirits may occupy. Ancestral shrines are the site of frequent sacrifices which are intended to invoke the return of spirits who may possess the witch doctor and provide him with special information and powers. The shrines are protected by means of a curse that is designed to bring misfortune or even death to those who violate the sanctity of these sacrificial sites. Several possession cults exist, the most prominent being the Ekpo society. Members are occasionally possessed by evil ancestral spirits who cause them to dance wildly, yell unintelligible jargon, and run through villages and over houses threatening to kill any woman who fails to flee. When a chief dies, seven human heads are collected and buried with him. All these practices are condoned among the Ekpo because they are regarded as the active manifestations of possessing spirits.

The Irish missionary priests of the area regard the people as being strongly spiritual, but, at the same time, as being great y in need of instruction in the true religion. They consider them a fearful people with many pagan practices.

When a pagan is instructed in Christianity and is baptized, all the paraphernalia of his traditional religion are destroyed and burned. These include, especially, the ancestral shrines, masks, and dolls. During the burning of such paraphernalia, the priest performs exorcism rites: the ashes and the ground are blessed with holy water and a cross is erected at the site. The convert is then baptized and instructed to no longer fear the evil spirits, rather to love and trust the God represented by the cross. The practising of the newly relinquished rituals is now prohibited, and membership in the Ekpo society is forbidden under threat of excommunication from the Church. The reasons for such restrictive measures are based largely on the fact that the Ekpo sanction evil within their society. (It is often suggested that the Ekpo are diabolical in influence, but the exact role and involvement of the Devil is not clear.)

There were two Catholic hospitals in the district and they provided contrasting attitudes towards possession, despite the fact that both were run by the same Irish order.

St. Mary's Hospital was located in the bush, the nearest large town being nearly thirty miles away. Its history was one of continual struggle for survival and of frequent misfortune. Two or three of the eight Irish sisters who ran the hospital were usually bedridden with malaria, despite the use of anti-malarials. The well frequently ran dry or the water became contaminated, and several epidemics spread through the hospital and the surrounding region. The Ibibio regarded these difficulties as being due to the strong *'jujtf* of the area, which was caused by the many 'black witch doctors'. The Catholic sisters, on the other hand, considered the area to be under strong diabolical influence; they seemed unaware of the significance of a large swamp located just a few hundred yards from the hospital. They were afraid to approach the ancestral shrines of the Ibibio and were forbidden to view the Ekpo. (This was an intelligent policy since the Ekpo were known to have injured priests and sisters who defied them.) The failures of the witch doctor's medicine frequently resulted in severe complications and

such cases were brought to the hospital; these complications were often considered to be the works of the Devil himself.

The sisters were somewhat confused regarding even the basic principles of medicine. The following example serves to illustrate this point. Upon awakening one morning, several of the Ibibio nurses at the hospital found their bodies covered with severe scratches. The local native healer explained that these wounds had been inflicted by spirits who were displeased with the nurses for working at the hospital. As the incidents multiplied, the fears of the staff increased. The European sisters, themselves at a loss to explain the incidents, began to wonder if the wounds really were the work of diabolical spirits. However, an investigation revealed that the local witch doctor was the cause of the incidents: he would blow heroin powder in the face of a sleeping nurse and thus put her into a deep sleep; he would then give her an injection of morphine and proceed to scratch her body. Thus, in many ways, the sisters accepted the fears and beliefs of the people.

St. Luke's Hospital, on the other hand, was located near a large city and presented a striking contrast. It was a success story: standards were very high, and misfortune and staff illness were rare. The people here attributed far fewer incidents to diabolical influence and possession. They regarded members of the Ekpo society as being amoral and feared their acts of murder and violence more than they did their presence. They did not hesitate to ban Ekpo members from the hospital grounds and considered the members themselves responsible for their actions during possession states.

In general, the Catholic missionaries all felt that a strong diabolical influence was at work. Possession states were occasionally considered manifestations of diabolical possession, or at least of diabolical influence. In most cases, there was a degree of confusion as to how much the Devil was involved, but the basic principle seemed to be, 'when in doubt, cast them out'.

The Islamic Attitude Towards Possession States

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Sunnî or orthodox Islam has always affirmed the ability of various supernatural agents, for example, Allah, angels, jinn, and demons, to possess human beings.

In pre-Islamic Arabia, the *kahin* (soothsayer), and originally the *sha'ir* (poet), were thought of as being possessed by jinn or demons *(shaytan,* pl. *shayatin),* who would utter through them "impassioned words, usually in verse, which the man could never compose by himself in ordinary, i.e. non-ecstatic, moments."[2] Such a supematurally

[1] I wish to express my thanks to Herman Landolt, also of the Institute, who made several valuable comments and suggestions for this paper.

[2] Toshihiko Izutsu, *God and Man in the Koran* (Tokyo, 1964), p. 168.

possessed person was called *majnun* (possessed by jinn). Because of their connection with the supernatural, both poets and soothsayers enjoyed considerable prestige among the nomadic tribes, to the point that the word for poet was in the majority of cases synonymous with *'qa'id,'* the word for tribal leader.[3] The *kahin,* for his part, was "interrogated on all important tribal and state occasions," and served as judge and diviner in public and private matters.[4]

The *Qur'an* and the sayings of Muhammad admit the ability of the supernatural to possess humans, and Muhammad fully realized the supernatural and political power such persons wielded. He is reported to have said to his favorite Muslim poet, Hassan ibn Thabit, "Your poetry is much more dangerous to our enemy than arrows shot in the dark of night."[5] Probably because soothsayers offered rival foci of power to the nascent Islamic state recourse to them was forbidden by Muhammad.[6]

Like the *kahin,* Muhammad clearly distinguished between what he considered the products of his own mind and utterances coming from a supernatural source, a source generally considered to be the angel Jibril (Gabriel).[7] Since the oaths which began many of the early surahs and their *saj'* meter were also used by the soothsayers to indicate supernatural inspiration, Muhammad was often accused by his Meccan opponents of being just another *kahin* or *tnajnun,* (e.g. *Qur'an* 37:35; 81:15–27; 52:29; 69:42).[8] His response to these attacks was never to ridicule the concept of jinn or demons, but instead to say that he was inspired by Allah, who created jinn just as he created humans, and was therefore superior in authority to them; and that while jinn could deceive men, the words of a prophet possessed by Allah or of an angel of Allah were necessarily true and must be obeyed.[9] On at least one occasion, however, Muhammad admitted to having received verses from Satan, permitting the worship of three pre-Islamic deities as the 'daughters of Allah' *(Qur'an* 53:1–18). These verses were abrogated by later portions of the *Qur'an.*

Even though Sunnî Islam considered Muhammad to be the 'sea of the prophets, it recognized the possession states of several mystics after his death as 'divinely inspired'. According to Louis Massignon, for the first three centuries after Muhammad's death, "divinely inspired utterances," later known by the technical term *shath,* "were incorporated [by Muslim orthodoxy] in the classical collections of *Hadith,* not as utterances of

[3] Ibid., p. 171.

[4] *Shorter Encyclopaedia of Islam* (Leiden and London, 1961), p. 207.

[5] Izutsu, p. 183.

[6] Montgomery Watt, *Muhammad at Medina* (Oxford, 1962), p. 311.

[7] Montgomery Watt, *Muhammad at Mecca* (London, 1960), pp. 53, 56–57.

[8] Ibid., p. 57.

[9] Izutsu, pp. 172–73. Although of no theological significance, several interesting details concerning the change in Muhammad's physical state during possession are preserved. See Watt, *Mecca,* pp. 55–56. See also al-Mas 'udi, *Muruj adh-Dhahab wa Ma'adin al Jawhar,* eds, and trans, de Meynard and de Corteille, (Paris, 1864) Vol. 3, 347 ff.

the mystics but as 'words of God' *(hadith qudsi*J,"[10] although from the ninth century onward they were excluded from these texts and regarded as the words of the mystics themselves. The famous mystic, al-Hailaj (d. 922), was thus possessed. His supporters claimed that it was not al-Hallaj, but God, speaking through him, who cried "I am God" *(Ana 'l-Haqq).* Orthodoxy thought otherwise in the tenth century, and al-Hallaj became a martyr.[11]

Even in the eleventh century, at the height of Islamic theological development, any discussion of possession states continued to be merely a refinement of typologies, approving of some and disapproving of others. Representative of the *type* of discussion of this period (although not necessarily of opinion) is the Persian writer on Sufism, al-Hujwiri (d. 1073?), who never questioned the existence of ecstasy *(wajd),* one form of which is possession. Al-Hujwiri simply made certain qualitative distinctions, and argued that those persons in ecstasy while 'intoxicated,' or without 'the faculty of discrimination,' are inferior to those in ecstasy where knowledge predominates over feeling, and that to consciously induce an ecstatic state is dangerous and unlawful.[12]

The attitude of contemporary Islamic orthodoxy is difficult to define for several reasons. Firstly, there has never been any ecclesiastical hierarchy in Islam capable of officially representing Muslim opinion, which in any case is presently divided between traditionalist sentiments, such as one finds at al-Azhar, and the views of various modernist and reform movements.[13] Secondly, modern Muslim theologians and European commentators seem to ignore the question of possession states as such.

However, we can legitimately speak of a Great Tradition' and a 'Little Tradition' in Islam, providing we regard these categories as poles of a continuum, and not as independent entities. The Great Tradition, adopted by the social and religious elite, bases Islam almost entirely on the *Qur'an* and the traditions of the Prophet, while the Little Tradition, or popular religion, adds such concepts as saint worship, Sufi brotherhoods *(tariq,* pl. *turuq),* and syncretisms, which often encourage possession states.[14] The general attitude of the representatives of the Great Tradition, or orthodoxy, towards the Little Tradition is not to deny the religious nature of their practices nor to

[10] *SEI,* p. 533. Cf. Louis Massignon, *Essai sur les Origines du Lexique Technique de la Mystique Musulmane* (Paris, 1954), p. 120. It is not altogether clear what Massignon means by 'classical collection's' of hadith

[11] Reynold A. Nicholson, *The Mystics of Islam* (London, 1963), p. 152.

[12] 'Ali b. Jthman al-Jullabi al-Hujwiri, *The Kashi al-Mahjub,* trans. R. A. Nicholson (London and Leiden, 1911), pp. 235–36; 414–15.

[13] G. E. von Grunebaum, *Modern Islam* (New York, 1964), pp. 306–7. Cf. Osman Amin, *Muhammad 'Abdu, Essai sur ses Idées Philosophiques et Religieuses* (Cairo, 1944). A brief sketch of modem Muslim movements can be found in H. A. R. Gibb, *Mohammedanism* (London, 1961), pp. 165–92.

[14] Cults encouraging possession among women in Sudan are known as *zar* cults, according to Harold Barclay, *Buuri el Lamaab* (Ithaca, 1964), pp. 196–209. This term is often incorrectly used to refer to the general phenomenon of spirit-possession in the entire Muslim world.

deprecate them, but to generally tolerate or ignore them.[15] If pressed, a Sunnî Muslim will usually admit the ability of Allah or of lower-ranking supernatural agents to possess human beings, but will often ridicule specific individuals who claim connections with the supernatural world.

The contemporary attitude of Islam towards possessions states can be clearly seen in North Africa. There, the urban and educated elite have little to do with saint cults or possession states.[16] But in popular belief and religious brotherhoods, the attitude towards possession has changed so little since medieval times that the terms used to discuss possession are the same as those used by the fourteenth century historian Ibn Khaldun, who distinguished between a person who is *majdhúb,* or possessed by a divine spirit, and *majnún,* simply possessed by jinn.[17]

I doubt whether a more explicit discussion of the religious implications of possession states (than that which is outlined here) will be forthcoming from Muslim orthodoxy. The latitudinous attitude of Sunnî Muslims toward non-orthodox practices serves the useful function of avoiding unnecessary splits in the Muslim community, and the spread of literacy and mass communications media in the Muslim world is tending to propagate Sunnî Islam at the expense of non-orthodox and regional variations.

Possession and Trance States: A Protestant View

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When matters concerning Christian faith and life are in debate, it is natural for a Protestant to have recourse to the scriptures of the Old and New Testaments. To be sure, references to the phenomena of possession and trance are to be found there. For example, the reference to the prophet Balaam in the Book of Numbers is surprisingly similar to the figure on the Greek vase which Dr. Sargant has brought before us so graphically.[18] "The oracle of Balaam, son of Beor, the oracle of the man whose eye is opened, the oracle of him who hears the Word of God, who sees the vision of the

[15] With the notable exception of the Wahhabis of Sahidi Arabia. Barclay gives the extreme example of two men in present-day Sudan who claim to be 'prophets,' but are merely ignored and kindly tolerated by their neighbors, who treat them as majnûn.

My general reference for this paragraph is von Grunebaum, "The Problem: Unity in Diversity," in *Unity and Variety in Muslim Civilization,* ed. von Grunebaum (Chicago and London, 1963), pp. 28–29.

[16] Roger Le Tourneau, "North Africa: Rigorism and Bewilderment," in *Unity and Variety,* pp. 244–45.

[17] Joseph Chelhod, *Les Structures du Sacré chez les Arabes* (Paris, 1964), pp. 191–92; Emile Dermenghem, *Le Culte des Saints dans l'Islam Maghrébin.* 8th ed. (Paris, 1954), pp. 29–30.

[18] *Editor's note:* The vase showed the upturned face of an enraptured devotee from early Greece. The facial expression was remarkably similar to many others that Dr. Sargant showed from very diverse places and eras.

Almighty falling down, but having his eyes uncovered" (Num. 24: 3, 4 RSV). This passage is virtually a verbal replica of the figure on the vase.

In the past, possession states have been ascribed to the presence of a deity or of a demon; yet, as far as I know, there is no creedal or official statement to this effect in Protestant formularies. Apparently, such phenomena are not of sufficient importance to warrant a considered declaration.

Protestants, like others in the Christian tradition, have found it hard to let go of the idea that some forms of physical illness, some altered states of consciousness, and some heretical beliefs are, in fact, evidence of demonic possession. This notion is to be found in the New Testament and has persisted in Christian thinking over the centuries. The presence of exorcists in the Church is sufficient evidence of this. Only as late as the sixteenth century did the Church of England decide to omit an exorc: sm from its Baptismal Service. And in a recent report, "The Church's Ministry of Healing," there are references to exorcism, though these references are made in a rather vague and guarded way. Apparently, the belief in demons and their exorcism is not altogether dead, even now.

Here I think we have to say that Protestant thinkers are as much children of their time as anyone else. Their interpretation of possession phenomena will tend to be in line with whatever world-view prevails. If this world-view finds a place for beliefs in God and in good and evil intelligences other than human intelligence, then possession and trance states will tend to be regarded as being due to some form of supernatural presence.

But does the Protestant believe that such states are due to the operation of the Holy Spirit, as Dr. Sargant seemed to suggest? The Protestant, I think, is far more likely to see evidence of the work of the Holy Spirit in a personal response of faith in God, or of faith in whatever is conceived to be of supreme worth. Such a response is rational (though it also goes beyond reason), total (in the sense that it is a response of the whole man), and unifying (in the sense that it exists in the context of personal wholeness or in a close approximation thereto). The response of faith is made in freedom, and finds its expression in worship, love, and service. As Saint Paul said, "But the fruit of the Spirit is love, joy, peace, patience, kindness, goodness, faithfulness, gentleness, self-control; against such there is no law" (Gal. 5: 22, 23, RSV).

Where there is true moral virtue, where there is a genuine quest for truth, where there is love and service, there is the Holy Spirit. So a Protestant would not ascribe to the Holy Spirit those phenomena which Dr. Sargant has illustrated. This is not to say that the Spirit may not use these phenomena when they occur, but it is to say that their direct causation cannot be ascribed to the Holy Spirit.

Some Christians have, of course, thought otherwise. Their views are dealt with by Saint Paul in his first letter to the Corinthians. He does not deny the phenomena of, say, glossolalia, but he suggests that other kinds of communication can be more edifying.

> "He who prophesies is greater than he who speaks in tongues... In church I would rather speak five words with my mind, in order to instruct others, than ten thousand words in a tongue" (I Cor. 14: 5, 19 RSV).

Perhaps the wisest procedure, with respect to possession and trance states, is not to rush in with hasty interpretations (which may contain a lot of projected material), but is, instead, to study them objectively. That is why a Protestant finds such a conference as this a most fruitful and worthwhile activity.

Concluding Remarks

My task is to formulate a brief conclusion to the proceedings of this conference — a difficult task at best, and an impossible one when there has been no time for reflection or constructive thought. AH that can be attempted now is to recapitulate the more important conclusions of our work, including both the positive contributions that have lasting, albeit limited, value and the stimulating suggestions that arise from the conflicting views that have been expressed.

A first conclusion, I would suggest, concerns methodology; and in this field we have learned, or should have learned, two lessons. The first lesson establishes the extreme importance of making a detailed study of specific and culturally defined forms of possession. It is only by beginning with an accurate description of particular, concrete behavior in clearly circumscribed situations that we can hope to discover the real meaning of such forms of behavior in the lives of the people concerned. Painstaking, analytical work is therefore essential, and we need as much of it as we as we can possibly obtain. But, and this is the second lesson, we have all been impressed by the extraordinary efficacy of comparative methods which classify the many varieties of possession experience and, in so doing, discover both the enormous range of possible differences and the few constants or invariants that justify the use of a limited number of major categories. The two modes of research, the analytical and the comparative, are of course complementary, and thus tend to be used in combination. But, whether employed individually or in combination, they will promote progress in our particular field of study, whereas vague generalizations and impressionistic renderings of heterogeneous and ill-described materia can only lead to generalized confusion and total obfuscation.

The second conclusion, I would suggest, concerns the complexity of the behavior which we are trying to understand and the absolute necessity of studying such behavior on a variety of different levels. It should be obvious to us by this time that reductionism to one level of explanation is surely wrong and that our only hope is to discriminate carefully between various levels of interpretation and analysis.

The first level to be considered is obviously the physiological. And at this level the questions that immediately arise are straightforward enough. For example, what

happens to the individual physical organism and, in particular, to the central nervous system when possession states are induced or sustained? What happens during the terminal phases of collapse and eventual recovery? This is, in itself, a multi-dimensional problem and clearly it will not be sufficient to discuss it solely in terms of cortical inhibition. For the ascending reticular system must certainly play a part in these states of arousal or vigilance, of inattention and disorientation and loss of consciousness, just as the Papez-McLean circuit of limbic lobe and thalamus and hypothalamus must intervene in states of emotional activation and tonic discharge. These basic physiological parameters, and many more, are certainly involved, and any real understanding of possession states must derive largely from the recognition and explicit description of *all* the physiological factors involved.

But physiology alone will not explain possession states. A second level of analysis must focus upon the inner structures and functions of the personalities concerned. Are all types of personality equally susceptible to such states? If not, what particular aptitudes are involved, and how are such aptitudes acquired? Altered states of consciousness certainly constitute a decisive factor, but how do altered states of consciousness come about and, more important still, what other positive functions do they release that play a role in determining the behavior of the possessed and the lasting results of the possession experience? To what extent is the specific nature of any given possession state due to initial constitution, to early education, to culturally induced belief, to deliberate learning? And so forth, indefinitely. Individuals susceptible to possession have specific types of personalities; they regress to certain states of dissociation in order to achieve particular forms of behavior. And changes of this kind can be explained only at the level of personality structure and function.

The third relevant level concerns interpersonal relations. In a majority of cases, possession is a distinctly social phenomenon, and the very suggestive comparison of possession and hypnosis has shown the critical importance of social situation, of mutual dependence with transfer and counter-transfer, and of reciprocal role-p aying in the induction and shaping of possession states. Such factors as inner needs channeled by cultural demand, personal suggestion, and social expectation are also of obvious relevance. No explanation of possession would be adequate if these interpersonal factors were not explicitly considered.

A fourth level of study regards possession as a form of social behavior within a specific cultural environment. Possession is a social institution rooted in a general system of other social structures and is interrelated with a host of other culturally determined behaviors. This is a distinctive level of socio-cultural organization which must be considered on its own terms, and which constitutes yet another aspect of the problem of explaining the total phenomenon of possession. A variety of different functions should be studied here, of which one deserves to be singled out for separate discussion. This is the therapeutic function, which is of particular importance since healing is frequently an explicitly formulated objective among people seeking possession experience. This deliberate aim of possession leads to a specific ordering of the over-

all behavioral pattern, and such intentions, with their attendant ritual patterns, are obviously of essential importance in our understanding of the institution as a whole.

A last level must finally be mentioned, a level to which Western specialists, with their rather narrow, rationalistic outlook, have been strangely inattentive: the level, that is, of specifically religious behavior. For in the great majority of cases, possession states are deliberately used to establish some sort of viable relationship with spirits or deities, with powers of good and evil, with the higher values that give meaning to life and that enable us to accept sickness and death with courage and equanimity. There is no point in debating the rational justification of such activities or the scientific validity of their concomitant theologies; the point to be kept in mind is that the devotees *do* believe in things spiritual and that they *do* endeavor to relate to their deities in the most favorable way possible. Their intentions and their beliefs are, therefore, very real factors in the causation of their behavior, and any theory which seeks to explain possession phenomena without taking into account these facts will necessarily fail to explain the real meaning of possession states and their ultimate significance in the life of the performer. And so a final understanding of possession phenomena must derive, in part at least, from the findings of a general psychology of religion. Any purported explanation which overlooks such considerations must prove as inadequate an account of possession states as a description of painting by one who is color-blind or an analysis of music by one who is tone-deaf.

These various levels of explanation would eventually, of course, have to be integrated into a coherent whole, for their individual autonomy must finally be resolved in the smoothly articulated unity of a single, comprehensive structure. But that, ultimately, is a problem of the behavioral sciences in general, and not a problem peculiar to the study of possession states.

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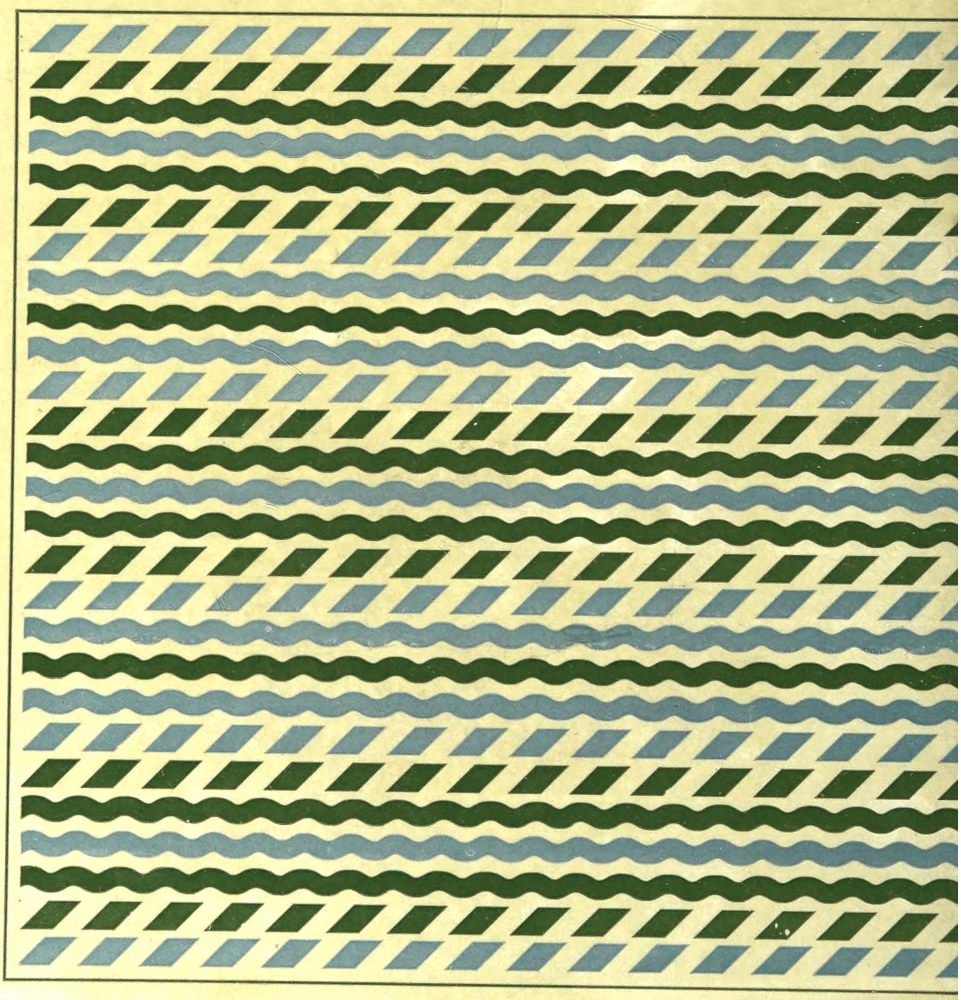

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