# Shamanism as an Experiencing of "the Unreal"

#### by ODD NORDLAND

#### I. Introduction

In the form of religion we call shamanism, the shaman, or "wizard" as we could call him, plays a central role. This form of religion is, first and foremost, indigenous to hunters and fishermen in arctic-circumpolar regions. If, for example, the flock or tribe suffers hardships because of sickness or a poor catch, the shaman takes over: he dances, beats the drum, sings, is filled with ecstasy and falls into a trance. When he awakens he relates that he has been out on a journey, has spoken with the spirits, and now he gives advice which will help the ones who have asked him for it.

Among the Laplanders in earlier times the person who had this central, religious function was called a *noaide*, or an *angakkoq* among the Eskimos of Greenland, but he is also well known among the northern tribes on the American continent and in Siberia. There is a wealth of interesting, religiohistorical material and religio-historical literature about shamanism and the shaman.

Despite this fact, all things considered, little has been done to interpret and understand the phenomena with which we are dealing. The most sceptical will perhaps dismiss the entire problem by pointing to the rich oral tradition as an origin of what the individual shaman claims to have experienced. Others will point to the reply made by the ex-angakkoq from Greenland to Knud Rasmussen, when he was asked why he did not continue with his skills: "I wasn't good enough at lying!"—Still others will say that these are experiences of a special kind, *cognitions*, individual knowledge. Thus we have explained the unusual with words which in turn themselves require an explanation.

But if we now proceed in the opposite direction, and accept the fact that the shaman does or can have experiences of the nature he describes, where do we then find, with the knowledge we possess today—something to compare these experiences with?

The psychical result, which the shaman is said to be capable of achieving, a result which also produces a purely physical manifestation, is the trance. If we define the trance as a loss of consciousness, to a greater or lesser degree, we are here dealing with a physical phenomenon in which the cerebrum is disconnected, to a greater or lesser extent.

Now, in itself, such a psychical situation is nothing unusual. It is this situation which each of us experiences blessedly recurring in sleep: we shield ourselves from impressions—light, of course, is the only one of our sensory impressions which we can shut out with any real effect. We close our eyes, we avoid arousing muscular feeling, sensations of pressure and heat by finding positions which we can maintain for longer periods, completely relaxed, agreeably warm. Then we turn to our inner stream of calm, and agreeably soothing pictures, pictures which do not engage us, do not excite us—then we fall asleep.

Now we are suddenly in a world of other dimensions, where we have experiences which we cannot classify as "real". They are "dreams", even though psychoanalysis has indeed revealed to us that "the dream" can be more closely connected with the vital problems of the individual, than much of what he thinks, says or writes in a waking state. The dream can also be both good and highly unpleasant. We may have a desire to return there as soon as we awake, or we may do everything we can to keep from returning to the horror that reigns where the cerebrum has no control.

Sleep and dreams are known to us all, but we can also fall into a trance, lose consciousness through hypnosis. A monotonous influence, for example from a strong and dominating personality, can result in some of us again being able to cross the borderline between conscious and reflective experience, and the region where we journey, speak and act without being masters over what takes place.

Not until more recent years have we had a significantly greater insight into what we call hypnotic experiences. We have received an impression of a remarkable cerebral activity where the combinations rush forth over a

register of stored impressions which we are not generally conscious of, where life is experienced in a flash of seconds, and where we make combinations in a manner that comes close to what we call creativity.—There can be no doubt that our conception of the human brain, as a combining and memorizing apparatus, has been changed to a great extent in the last few years.

Our usual conception of the shaman is, indeed, that he employs monotonous effects to fall into ecstasy and arrive at the state of trance: he sings and dances alone, or along with others. The auditory stimulations and the motoric movements, in increasing intensity, and the emotional induction from the crowd around him result in his falling into a trance in the end, and the disconnecting of higher cerebral centers: his "soul" journeys, released from the body. It is now that he is said to be capable of relating experiences which we cannot judge on the basis of our "knowledge", experiences which he and those present, on their part, accept as knowledge.

The special position of the shaman, and the specific social and cultural situation which is the background for his contribution, make it extremely difficult to approach phenomena like ecstasy and the trance through observation and experiments.

But there are other methods. In our technical and mechanized civilization, monotonous stimulation is steadily increasing, and a considerable number of situations exist which have raised problems for fertile meditation on this subject. For pilots, monotony is perhaps especially to be reckoned with, and its effects can be particularly serious. It is a well known fact that the flashes of sunlight on the blades of the helicopter rotor, with so many flashes per second, make the pilot sleepy, lead to a trance and paralysis of the power to act. For this reason helicopter pilots wear eyeshades which eliminate the effect of the light.

We are familiar with a number of examples of pilots of jet planes, at great heights and considerable speed, having had hallucinations, with loss of the sense of locality, equilibrium, and distortion of vision. Of 137 pilots in the United States who were questioned, 48 had had such unusual experiences.—Psychiatrists, who have worked with aviational medicine, have been concerned with this type of phenomenon.

There is a great deal we do not yet know about this side of our cerebral

functions. Nonetheless, in the past ten years, a number of interesting studies have been made in this field which have changed our conception of cerebral functions, and which can support an explanation of many of the questions which we have before us here.

### 2. The McGill Experiments with "Sensory Deprivation"

The experiments and theoretical research which D. O. Hebb has conducted at McGill University, in recent years with assistance from Bexton, Heron and Scott, aim at throwing light upon the effects of monotony on the personality. As far as I have been able to understand, it is from the investigations in this and related areas that we are obtaining results which can help us in a better understanding of what a trance really is, and what the cognitions we are dealing with really are.

The field of research which we can here benefit from is usually known as "sensory deprivation": we could call it experiments with "reduced stimulation of the senses".

The object of these experiments with "sensory deprivation" is to isolate the subject of the experiment, and to bring under control the stimulations to which he is subjected. In various ways he can be prevented from receiving stimulations of light, sound, cutaneous sensations, etc., or he can receive monotonous stimulations of this kind. The question then is the way in which he reacts to this.

It has turned out that here we have promising but difficult experiments, and we have already received invaluable support to the information we have about important areas of the relationship between the individual and "reality". When we realize how fundamental psychophysics has been to the progress of our psychological research, it is remarkable to think that we are here dealing with the results of research undertaken during the past twelve to fourteen years. The best survey of the discoveries and progress which have been made in this area are undoubtedly to be found in the accounts which were presented three years ago at a symposium at the Harvard Medical School. The results of a research project, which had been worked out according to the method of "sensory deprivation", were submitted, and a considerable number of investigators from the United States and Canada were present.

Woodburn Heron explained a series of experiments at McGill. He experimented with male students who received payment for participating. The subject of the experiment was warned that he would be taking part in an experiment which would last for an indefinite period of time. Then he took his place on a comfortable bed, in a small, lighted, sound proofed experimental room. The student put on goggles with translucent glass so that he could see light, but was not able to distinguish contours or colors. His lower arms were placed in padded cardboard coverings which prevented the sensory cells in the lower arms and fingers from receiving changes in stimuli. Nor was the student able to hear very much; his head was resting on a foamrubber pillow; the room was isolated against sound, and the whirring of the ventilating fans also hindered the interpretation of sound. The experiment was controlled by an electroencephalogram with wires attached to the base of the student's skull, and the curves indicating the cerebral functions were recorded. Between the subject and the conductor of the experiment there was a loudspeaker connection. The subject was not given any information about time, only told to endure as long as he could. Most of the subjects managed for two or three days. If they needed assistance, they could ask for it. Of twenty-nine students, eighteen came through the first series of controltests.

In this experiment situation a considerable number of changes in cerebral activity were revealed. To begin with, the subject was able to relax and think about his customary work, ponder over personal problems, etc. However, it soon appeared difficult to maintain the power of concentration, and "they just let their thoughts wander". Then there could be periods when they did not think of anything. Some said afterwards that they had difficulty in determining whether they were awake or asleep, and they had changing perceptions.

Three of the subjects had clear hallucinations of happenings which they thought were taking place in the experiment room. One ducked his head to avoid objects which seemed to come towards him. Another thought that images were being projected on the glass of his spectacles. A third thought there was "someone" in the room with him.

Twenty-five of the twenty-nine were able to report hallucinations in one form or another. First they saw brighter light effects in the range of vision,

then followed spots and stripes of light, geometric figures and patterns, then solitary objects on monotonous backgrounds, and finally scenes in full size. If they wanted to study a section of what they saw, they had only to move their eyes and stare, as if at a picture.

They had little control over what they saw. One saw nothing but goggles, no matter what he did. The pictures often prevented sleep. Another was so upset by what he saw, and the fact that he could not get rid of it, that he left the room and interrupted the experiment. The hallucinations lasted from twenty to seventy hours.

The hallucinations strongly depended upon stimulation from diffuse light through the translucent glass in the goggles. After several days of isolation, wearing these special goggles, one control group was given other spectacles. With these, however, the hallucinations were no longer the rule, and in darkness they were gone after a few hours.

On the basis of these experiments, Woodburn Heron felt that they had an effect on some of the mechanisms which are responsible for the regulation of the electric functions of the brain. He believes that it is a question of changes in those parts of the brain stem which we know play a role in the regulation of the cerebral functions. It is here a question of parts of the brain which are automatically and functionally connected with the sensory apparatus.

The experiments seem to confirm the fact that if the cerebral functions are to continue their regular activity, they must be stimulated by changes in the sensory influences. The organization which is necessary for continuing the processes of thought and action will thus be kept functioning by the constant variation in thoughts for which the activity of movement is responsible.

Many of the other experiments, conducted with "sensory deprivation" of the sensory apparatus, also clearly brought out the fact that the brain is dependent upon a conscious registration of the surroundings through the senses.

Stanford J. Freedman and his co-workers cite an experiment with fourteen volunteer students chosen at random. Through interviews and tests, people who showed signs of lacking psychical stability were eliminated. Then eight of the students, one after the other, lay down on a bed in a small room. The light by the head was as strong as a 30 watt bulb, the student was given

translucent goggles, and earphones which provided a soft mixture of disorganized noises ("white noise").

Each of the eight students, with spectacles, "white noise" and arm-coverings, found it difficult to think coherently and to concentrate. They had difficulties with speech, and were aware of "bodily changes": a smaller body floating in space, etc. Four had hallucinations, heard sounds and voices. Four developed anxiety of a paranoidal nature, three had visual "hallucinations" which had a considerable resemblance to those which have been described during the use of mescalin or in a hypnagogic state: "I saw a hand and a stack of thin magazines, about maybe ten of them, and I, I was only concentrating on the hand and the corners of the magazines, and he picked one up, the hand picked one up, and a voice came and said: "The article isn't very difficult, and then reverberated saying the same thing over again as though it were in an echo chamber"....

Another related: "The herd of elephants. Oh, that was pretty. That came very spontaneously. It was just a sort of elephants in black, with pink and blue and purple ... They were moving. The elephants themselves weren't moving, the picture was moving as if it were a closeup, sort of a backdrop ... the elephants were gray ... the background was pink ... they weren't real elephants, because they were more like cutouts."

Freedman believes that when the external stimuli become so monotonous as here, the subject of the experiment glides into a kind of dreamlike state between sleep and wakefulness. Auditory and visual "hallucinations", on the other hand, must be interpreted as a result of the fact that the cerebral mechanisms which otherwise take care of the stimuli from the outer sensory apparatus, make one tempted to classify the stimulants which are nonetheless to be found because of the impulse there is to find a meaning in the world around us. The ego "turns inwards" when no meaning can be found in the external sensory stimulations that are received.

When we are awake, we must believe in a central activity in the brain, an activity in the central nervous system, constantly and automatically—like the seekers in the register of an automatic telephone system—working to organize relationships which we perceive in our surroundings. The perception is always selective, and always in the process of trying the codes which are necessary for maintaining the different patterns. Now when the inner

frame of reference is broken down, it becomes difficult and, in the end, impossible to "structurize" the outside world, to place constancy and stability in the reality one perceives. Now various changing, unclear figures appeared, geometrical figures changing contours, altering in size and shape, etc.

Tendencies in this direction will always be found in the functions which are also to be found in a normal cerebral condition, but the secondary mechanism which gives structure to our surroundings, and which gives it stability, keeps these primary functions under control. With "reduced stimulation" they break through and cause the subject of the experiment to have a particular kind of experience.

Experiments which not only reduced the stimulation of light, sound and cutaneous feeling, but also hindered movement resulted in feelings of panic and hallucinations. They were interpreted as being so "real" that one of the participants in the experiment went, afterwards, to a psychiatrist for consultation.

Georg E. Ruff and his co-workers emphasize that the way in which an individual reacts to "sensory deprivation" is connected with his own personality traits: it turns out that those who are clearly aware of their own personality, who have a clear understanding of their ego, their "identity"—to employ the conception with which almost every poet in Western Europe has been preoccupied in recent years—those persons are also the ones who, during an experiment, will fluctuate least from normal behavior and experiences. A clear understanding of the ego carries with it a strong feeling of being the same person in every circumstance. The individual who is certain of his identity thus has an inner harmony which, in itself, activates and makes it less dependent upon external sensory influence (D. Rapaport: "The theory of ego autonomy: a generalisation." Bull. Menninger Clin. 22, 13, 1958, p. 182.)

These new discoveries, made according to methods of experimentation with sensory deprivation, throw new light upon the pattern of actions and "cognitions" which we usually call "shamanism".

It appears to have been experimentally proven that each one of us is capable of having visual and auditory experiences which we would not count as "real". They can be induced under certain conditions which are not

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connected with sleep, hypnosis, hysteria or the effects of intoxicants. These experiences are always equally surprising, frightening and shocking to the one who is not prepared. For lack of another name, we must still call these cognitative experiences "hallucinations". They occur as a result of regulating cerebral functions, when the brain otherwise has a small variety of sensory impressions to react to.

Monotonous stimulation from the sensory apparatus is the prerequisite if these aspects of the cerebral functions are to result in "hallucinations".—We are still barely on the threshold of work in a complicated and interesting field of research into these cerebral functions, and there is a tremendous amount which we do not know, but for which certain basic aspects are clear.

## 3. Monotony, Destruction of Personal Identity, Isolation and Intuition as Basic Features of Shamanism

It appears to be clear that monotony is the basis of many forms of shamanism: monotonous song, drumming, music, dance with rhythmic movements. At other times it can be the restriction of movement, staring into the flames, darkness, even masks with special effects of light for the eyes. In the experiments we have described, it is not even necessary to attain the heights of emotion we could call ecstasy in order to bring about the trance and the hallucination.

I will not maintain that we are to go to the bulk of information about shamanism, and make it coincide with these insights into cerebral functions and hallucinations, but I would like to point out that such experiences can be incorporated into shamanism. The method of procedure can also be employed to such ends.

On the other hand, if once a shaman has *had* such experiences, he will for ever be convinced that he has contact with the spirits in the unseen, and he will be convinced of the justification of the religion he believes in, and the legitimacy of the power he has. The effects of this on both himself and on others are still too little known because there is too little knowledge about the relationship between the body and the psyche.

It is here that we again have the feeling of astonishment and—I would even go so far as to call it respect for the total amount of knowledge which

mankind has amassed in its long cohabitation with a harsh or bountiful nature, and with the forces *outside* and *within* man himself. What a wealth of knowledge may be concealed in a system of religious ceremonies and rituals, which we are only slowly beginning to understand the wisdom of.

Did shamanism, as a whole, have an insight into connections hidden behind what we call "identity" and "ego", and did it make use of this insight? I will answer by once again pointing to the hitherto unexplained phenomenon of the shaman himself, in large areas, dressing in woman's clothing if he is a man, of his often being a hermaphrodite in other places, for example, in some Indian cultures in America. In addition the shaman, in language and behavior, often looks for his pattern among members of the opposite sex.

When we know how fundamental the roles of male and female are for the comprehension of identity, of ego in an individual, we understand once more that actions and behavior of this kind were the prerequisites for his being able to give free reign to the primary functions without resistance. By destroying his own pattern of character, he opens the way for the voices, the visions.

There is scarcely anything which tells us more decisively how self-destructive it was to be a shaman. One could learn to shut oneself out, or deaden the impressions from normal surroundings. But now and then experience and examples demanded more, one had to sacrifice a part of one's self, one's own personality.

What a strength it must have been for the shaman to have contact with the spirits, and I do not grudge him the communion he thought he had! For there is so much in the shaman's situation that makes him stand out as an individual with special contact difficulties. Not only did the shift in his sexual role, or his unclear sexual status cause him difficulties with the most intimate form of human contact, the sexual, but there are also things which indicate that the reduced sensory stimulation, which the system made use of, created a particularly strong need for contact.

Here too there is much we do not know, both about cerebral functions and about the problem of social contact. But it is clear that "sensory deprivation" fosters a need for contact with people, a need so intense that the sexual element predominates in the consciousness of the one who finds himself

placed in such a situation. In part it is directed towards the opposite sex, in part towards the same sex.

"Sensory deprivation" also implies social isolation. It produces an intense feeling of "being different". It dissolves an ego which already has little resistance. To feelings of this kind, the shaman will necessarily react with an intense need for contact. Out of such a shattering experience of loneliness and social isolation, the *helper* must be created, the person who is a support and a help to the shaman, and with whom he communes socially in his attempts to join the fellowship of the others again.

For the shaman, the return to a social fellowship is through the helper. It is not strange that this helper is thanked, praised and flattered for his art, for his song, for his friendship, or even that the shaman seeks sexual intercourse with the helper and leaves the cold isolation out there where the spirits reign. Or shall we say the cold isolation within, where he has lived, withdrawn, like the snail in an inhuman cohabitation with the primary functions in his own central nervous system?

Nonetheless, if we now feel that we understand more of the way in which shamanism relies upon certain cerebral functions, which can be experimentally proven, then a long row of no less important problems appears. First and foremost: is shamanism capable of solving problems by turning to these primary functions? Does the shaman here possess resources which he can employ for the good of the people for whom he feels responsibility? Or is the whole thing merely a flimsy, intense experience, without any connection with outer realities?

If we distinguish between conscious logical thought, and the more unconscious form of problem-solving which we call intuition, then there is a basic distinction between them: the solution of problems on the conscious level makes use of words. In the unconscious activity which is entailed in intuition, we must believe that these combinations we make build upon visual, auditory and other sensory memories. Now when we arrive at a solution on an intuitive basis, abstraction and symbolism, to a lesser degree, are materials for the solution.

It is just such a stream of complex pictures which we can imagine the shaman resorting to, but can his cohabitation with them also provide solutions which have any real value? In order to reply to this, let us first imagine what kind of forces we may be dealing with here. The person who, in one way or another, has experienced "the unreal", revealing shaman qualities, or has received a shaman election, will, around such an experience, amass stories and legends about *the way* a shaman acts and *what* he experiences.

It is reasonable to believe that such information, in the connections they have with a central, momentous psychical experience, might add to and give content to the shaman's experience on a subsequent occasion, in the manner of a hypnotic command from an overpowering will.

Much of the equipment used by the shaman—the figures on the drum, metal animals on the garments, different kinds of "riding" and "driving animals"—can be employed to retain central conceptions about "journeys" and "ways of journeying", right up to the point when the shaman glides over into his inner experiences. This apparatus may also be suggestive, and can give the experiences of different shamans a certain aspect of uniformity.

When the shaman turns to his inner experiences, his inner flow of pictures, he is, in the trance, freed of much of what, in bodily functions, consciousness or surroundings, might prevent him from concentrating on the problem he has to solve. He is also released from the "tabu-conceptions" with which society and tradition can bind his thoughts. He is deprived of his usual critical powers so that he can have experiences in the area where the problem lies.

We can also imagine that the problem may be of such a nature that it is not easy to think out logically and in full consciousness. Or it may demand abstractions, and make demands upon formulations and logical conclusions which make contemplation difficult.

Let us imagine that the shaman has the task of trying to find out in which direction the wild reindeer have gone, so that the starved and exhausted hunters can find the game they need to save their tribe. A long list of considerations is involved here, and decides where the animals are now staying: first, the snow and the low temperatures in the autumn, the autumn grazing places, the prevailing winds in early winter, flocks of wolves, storms, the amount of snow in the lowlands and up in the mountains, the condition of the ice on lakes and rivers. To this must be added a knowledge about conditions in previous years, reports from hunters and travellers.

Concentrating on all this, we can imagine that the shaman, on his "journey", experiences a long row of pictures and intuitions which, with lightning speed, are set apart and combined, accepted or discarded in their combinations. Out of this rush through various kinds of information, experiences and pictures, the shaman returns with an experience of an intuitive solution to the problem: "I have seen the reindeer by the valleys to the east."

If we think in this manner, it is not impossible that the shaman has a solution here which would have otherwise taken him endless speculations to arrive at. Perhaps it would not have been at all possible for him to arrive at such a solution logically and consciously.—It is not unreasonable, on the contrary, it seems to be probable that the shaman, in his trance, employs mental resources to which a modern person no longer has access, to the same extent. In our part of the world, we have long based our solution of problems, first and foremost, on symbols, and on the language. We have chosen an area in which we are continually building more extensively upon our knowledge of cause and effect, and in this state we leave our knowledge to posterity.

If we here imagine a form of intuitive problem-solving, which does not employ our usual abstractions, we also arrive at a better understanding of the foundation upon which shamanism rests. Shamanism is at home in a culture lacking writing, in a culture without social organization. Shamanism is, first and foremost, characteristic of the fringe-cultures to the north where people subsist by primitive hunting and fishing. It is a question of people who have organized their way of thinking by symbols and social specialization to a lesser degree than in other cultures. It is also a question of people who, more often than others, with life at stake, must mobilize all their resources in order to survive. It is a question of people who, in a monotonous landscape and with few impressions, can come into situations when hunger, exhaustion and isolation can limit stimulation, and turn contemplative life inwards to primary experiences.

But in reality, it is probably easier for us to imagine that at every step in the saga of mankind both methods of problem-solving have been employed, but that we, in our world of symbols and abstraction, are more and more alien to what has been a less precise problem-solving, filled with intense experiences and with strange, penetrating effects upon the relationship between personality and social milieu.—The primitive, migratory society, with its elementary form of social organization, with incomplete equipment of thought and abstraction, cannot afford to risk life and security on our conscious method of problem-solving as the *only* method of procedure.

Where our society trains the scientist in the specialized use of symbols and language, so the migratory cultures have their specialists who, in a crisis, can also employ the less conscious and less precise forms of problem-solving, on the level where man, in his thinking, parted company with his other fellow-creatures.

# 4. The Personality Structure of the Shamans as Tested by means of the Rorschach Test

In recent years psychologists and psychiatrists have occupied themselves extensively with the problems connected with the activity of the shaman and his psyche. The main questions are no longer his obvious ambivalent sexual role or the question of his "normality". The most promising approach seems to be the efforts to determine the dominant characteristics of his personality structure by means of testing, first and foremost by means of the Rorschach tests (Bruno Klopfer & L. Bryce Boyer, "Notes on the Personality Structure of a North American Indian Shaman: Rorschach Interpretation"; and L. Bryce Boyer, Bruno Klopfer, Florence B. Brawer & Hayao Kawai, "Comparisons of the Shamans and Pseudoshamans of the Apaches of the Mescalero Indian Reservation: A Rorschach Study", Journal of Projective Techniques, vol. 25, 1961, and vol. 28, 1964).

Boyer describes in his first study the test reactions of a shaman, Black Eye, of the Apache tribe of the Mescalero Indian Reservation. This seems to be the first time a study of this kind has been undertaken with a shaman as the test subject, and the result is of great interest both as regards the shaman within general social anthropology and his place in the study of religion.

The Rorschach test operates with a series of coloured blots which have no assigned meaning but which are open to interpretation according to the personality traits of the person tested. It is at present one of our most important and most widely utilized character tests.

Black Eye tended to interpret the figures of the Rorschach test from a frame

of reference dominated by his role as medicine man and shaman. He had a general tendency to interpret in the direction of "star", "cloud", "lightning", just such phenomena in nature which he regularly used as material for interpretations in his relationship with the "powers". In other words, it seems that one of the most fundamental attitudes of this shaman was his conception of himself as "spoken to" or "rendered messages through" by elements in his surroundings. He is on a more or less constant alert as regards his relations towards the "powers"; he has attained a "symbolic attitude" towards his surroundings.

The "alertness" of this shaman gave the impression of a general background in his personality of "deep anxiety connected with the strong and totally unrefined impulsive sensuous reaction". "He identifies his urges with his magic mandate, but is very careful, at the same time, to avoid any ego responsibility for his actions." This is just the kind of personality one would expect to fulfil the role of "intermediary" in a religious group; in other cultures he would serve as a prophet. His openness to the symbolic value of elements in his surroundings seems to be related to the general attitude of the artist; but in some important respects he is different: in his attitude towards the supernatural powers and in his social function derived from his role as "intermediary" between the "powers" and his culture.

The shaman feels himself dependent on outside powers—"he is used"—whereas the artist, more independently, uses the outside powers in his creativeness, in the "world" that he creates, in his art. But even the artist may at times feel himself under the sway of uncontrolled powers. He may talk of "godlike inspiration", or he may, for instance, as a surrealistic painter or writer of symbolic literature, see himself as an agent of his own unconscious creative activities.

The artist who considers himself inspired by God or drawing upon sources of "unconscious creativity" generally deprecates the idea that he is personally responsible for creative utterances in the sense that they might be consciously controlled. Thus even the artist may feel himself to be an "intermediary" much in the same way that the shaman does. The difference lies in the conception of where the powers are situated to which one takes this intermediating attitude: either within one's own personality or outside, thus reducing the degree of personal responsibility. The difference lies also in the kind of

authority attributed to the "powers": powers situated outside the ego will generally be accepted as having greater authority.

The study of the Apache shamans of the Mescalero Reservation divided the shamans into two groups according to the way they were perceived by themselves and/or their society. Boyer, Klopfer, Brawer & Kawai singled out twelve shamans (seven men, five women) and seven pseudoshamans (four men, three women). The shamans were regarded as such both by themselves and their society. The pseudoshamans lacked this double confirmation of their status; they were regarded as shamans either by themselves or by their society, but were not recognised as shamans by both parties.

To compare the results with general traits, a control group was established, thirty men and twenty-four women, all except four over fifty years old in order to ensure that they were all well established within the traditional social pattern and value system of the tribe.

The study of this Indian group comprised both psychoanalytically oriented interviews, frequently in a therapeutic situation, and Rorschach tests. Thus it was possible to draw conclusions from a relatively large number of observations and from very rare material.

The comparison between the two differently defined groups of shamans brought out that the shamans were more like hysterics than the pseudo-shamans were. At the same time, the shamans had a greater interest in the theoretical value of objective information and discovered characteristic traits in a given material more quickly than the pseudoshamans. This was concluded from the way they reacted to the Rorschach test.

Commenting on this, Klopfer states: "The more people are egoistically involved and lose practically all characteristics of individual personalities from the Rorschach standpoint, the more likely they are to be found among the pseudoshamans, while the real shaman appears capable of using regression in the service of the ego, in Freudian terms. This accounts for the peculiar mixture between hysterical and real creative characteristics to be found in the Rorschach data derived from the shamans and which is absent in those of the pseudoshamans."

The shaman, according to this study, is not involved in the interpretation of the "messages" on his own behalf, whereas the pseudoshaman is more interested in the use of the message for his own gain. The shaman also has

the possibility of regression for meaningful purposes. He has readier access to all levels of development as an individual and a greater possibility for remembering and re-experiencing earlier events and emotions than the pseudo-shaman.

Boyer, Klopfer, et al., also stress the presence of ego-controlled availability of primary processes in the shaman, something which in itself is intimately related to creativity and showmanship. These factors seem to be "as necessary for the successful practice of shamanism as they are for the artist whose products are to prove lasting in acceptance and influence, for the true prophet, and for the convincing functions of the impostor."

The division of the shamans and pseudoshamans into separate groups might be criticized as in some respects insufficient or even misleading. Whether or not the shaman is regarded as a "real" shaman by the group might say something about his general success in his undertakings or his adherence to the traditional pattern. It says nothing about his own attitude towards his social functions or his own capability or his attitude towards the powers in whose sway he feels himself to be. The person who is counted as a pseudoshaman might therefore only differ from the shaman as far as the reactions of the society towards his shamanism or his attitude towards the "powers" has any effect upon the formation of his personality.

But in spite of this reservation, the picture given of the personality of the shaman, supported by interviews, analytic therapy, and tests, is of the utmost importance in understanding the functions of the shaman within society and his place in the history of religion. New and more extensive studies from other parts of the world according to these methods would be highly welcome. They are urgently needed in the Arctic circumpolar regions where the tradition and practice of shamanism is rapidly diminishing owing to acculturation, industrialization, and social pressure.

New psychological studies of the personality of the shaman reveal to us that he regards himself as an observer, and his society sees him as both observer and interpreter. He is more or less constantly on the alert for signs through which the powers, the gods, approach him with messages of importance to him and his group. He does not regard himself as the creator of such messages, the messages *are* there, and he is the one to pass them on to his group so that the appropriate steps might be taken to avert, defend, or act.

Besides this general attitude towards the symbols that surround him, the shaman is apt to translate his surroundings and interpret them according to the language and the symbols of his mythic training. This is nothing more than what should be expected of a person who has been trained within a system of concepts so thoroughly that the system acts as his constant frame of reference.

The shaman reacts like any such person in any culture at any time. A specialist in Ibsen will interpret life in terms of symbols from Ibsen's plays and will constantly impress these symbols on his surroundings: "He is a Peer Gynt-like escapist"; "He comes like an evil omen, like the white Rosmersholm horses". The theologian will refer as often to his Bible, as will the biologist to his Darwin.

The group will classify such persons as "interesting personalities" or "learned men" or "bores", according to the function they fulfil and the power they have of impressing their "message" on their contemporaries.

In an undifferentiated society, where secular and spiritual leadership is vaguely institutionalized, the shaman is looked up to not only for his special powers and religious functions but also as a "knower" or "wise man" in general. He carries in himself, because of his special authority, many of the functions which in more structured societies are covered by the spiritual and worldly decision-makers.

What about the "honesty" of the shaman? Boyer was impertinent enough to raise that question, trying to study the role of "imposture" in shamanism. With psychoanalytically founded methods he wanted to penetrate the behavioral side of shamanism in order to judge the degree of conscious or unconscious pose.

Boyer came to the conclusion that the shamans were, on the whole, typical members of the Mescalero group, showing psychological congruence with it. They differed from the others in two important respects: their possession of greater creative potential, as mentioned, and in their successful use of imposture.

Boyer maintains that imposture seems to be as necessary for the successful practice of shamanism as showmanship is for the artist. But here we meet with the possibility of imposture on many levels, from the basically honest attitude of the artist who at the moment of performance is what he poses as

being to the level at which the angakkoq of Knud Rasmussen gave up his shamanistic role, realizing that he "wasn't good enough at lying".

What then about the hysterical traits that also were typical of the shamans among the Mescalero Indians and not so typical of the pseudo-shamans? The capacity of regression in the service of the ego is an important trait of the personality both of the hysteric and, for instance, the artist. Both use their power of a more ready contact with experience at earlier stages in their development and their capacity for re-experiencing, often unconsciously, in furthering their ends. The shaman here may be compared with the artist in his greater ego-controlled ability to call upon the primary processes. The hysteric uses this capacity with little or no consistency to further his aims of the moment.

#### 5. Conclusions

The ability of primary-process thinking, of making unconventional combinations, like those of the child in his reflections on his surroundings, are important aspects of creativity. It is highly interesting that this ability is the most characteristic personality trait of the shaman.

I have, earlier in this study, pointed to the part that less conscious, less precise, and non-verbal forms of problem-solving might play in shamanism. This implies "regression" and a broad contact with the previous experience of the individual, down to the level at which "thinking" might be regarded as a kind of non-verbal combination of motor reminiscences. In principle, drawing upon these resources by the shaman, implies an even more intimate turning to primary processes in which intimations combine in the shadows and whispers of observations which cannot at present and perhaps never, will be brought forth to manifest consciousness. To activate these primary processes, more utilized in earlier stages in the development of our species, the shaman could use his special technique of regression and unconsciousness.

The shaman must then be regarded as an individual who has unusual capacities for contact with his own stock of experiences, down to the non-verbal level, a power of untraceable combination at such levels, and the ability to accept the resulting combinations as problem-solving solutions.

An individual like the shaman, who is constantly on the alert for "the

powers" and who feels their total impact on the life of himself and his group, would naturally not be a calm and reflecting man. Through his repeated discoveries of "messages", he lives under recurrent emotional shocks. His life is filled with moments in which he is emotionally "raised", and these moments have an influence on his whole organism.

There is still a lot we do not know about our own body and the complex of happenings that we call "memory". Knowledge of body chemistry and its emotional effects seems to be accelerating. Intense emotions are felt to have special effects, such as giving the experience of catharsis to the mind and body. Recurring strong emotions might therefore be one of the prerequisites for easier access to the non-verbal level of motoric reminiscenses. The "message" in itself being both reason for and result of emotional constitution and emotional habits.

The emotions felt by the shaman, and observed by the audience, seem to be one of the reasons for the position he occupies in his society. The shaman acts on behalf of the group. The group is intensely occupied with his actions and emotions, and the emotions are in this situation easily transferable to the group. At the same time the group never understands the reason for his emotions and registers the actions and reactions of the shaman as unusual, perhaps even as supernatural. Efforts on behalf of the group, efforts for the welfare of the group in relation to powers not comprehended, are one of the reasons for the "awe-inspired" attitude felt towards the shaman. In our own society, this awe-inspiring social function of the shaman is replaced, not by the artist, but, perhaps foremost, by the scientist.