JOURNEY INTO THE UNDERWORLD* AN EXPERIMENT TO INTERPRET THE PSYCHOLOGICAL BACKGROUND OF SHAMANISM

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Shamanism is a deep rooted belief of Siberian cultures. Its central figure is the shaman who mediates between the human and the spiritual world. One of his main characteristics is that he reaches an altered state of consciousness, which helps him wrestle successfully with the problem he intended to cope with.

The shaman cosmology divides the universe into three spheres: the upper-, the middle- and the underworld. The upper- and the underworld are the spiritual spheres, where gods, spirits and ghosts live. These two spheres break up into even more sub-spheres. Depending on the different cultures their number can be three, seven or nine. The middle world is the habitation of people.

The shaman must be familiar with the structure of the whole universe and all of the ghosts and spirits of it. These figures play an important role in his life. They help him to initiate and to find his way, and to cope with the problem when he is taking his journey into the underworld.

One of the basic experiences in a shaman's life is the so-called shaman-illness. Its visible signs are similar to those mental states which are diagnosed as psychosis or depression in current psychiatric terminology. We know from several studies that in this special state the Siberian shaman is lying unconsciously for days or weeks, or in other cases he disappears and stops the communication with his society. This state is similar to a metaphorical death, where he goes through a total bodily and mental disconnectedness.

The recovering from the shaman-illness means his revival and initiation, and he also gets the spiritual strength that is necessary for his coming work. This rebirth into a higher state of being makes him able to help others, to heal the sick. If one has not experienced the heal himself, he will not be able to help others, says the ancient wisdom.

It is important to emphasise, that contrary to the priests of world-religions, the shaman does not prepare intentionally for his new identity. He gets his calling from spirits, who later endue him with special powers. The shaman, very often, tries to reject this calling, but later, usually suffering from the shaman-illness, he undertakes it, goes through the hard process of initiation, and finally accomplishes the way of shaman ordered by the culture he lives in.

During the rites the shaman wears special objects on his clothes and a crown

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on his head, which give him even more strength in his work. But his main instrument is his drum. Even its preparation is an important part of his learning process and initiation. It is round like a disc, covered with leather and decorated with painted symbols related to the structure of universe mentioned above. First, the shaman warms it up, he says to weak it up, at the fire, and then, like a good horse, it flies his owner into the underworld. It also helps him to wake up the spirits and call them to the place of the rite.

Studies on shamanism usually focus on the behaviour and trance of shamans and do not pay much attention to the mental processes which are going on in the other participants of the rite. Vilmos Diószegi mentions somewhere how deeply people, who are present, get involved into the rite, how they follow the shaman on his journey and how they become more sensitive to suggestions. Their mental state also changes in more respects. Their imagination becomes more vivid, and they feel that the time and space are changing dramatically around and inside them. These experiences are very similar to those in hypnosis1.

In our laboratory experiment people were asked to enter into the underworld and to take a journey while drums were on. We focused on three questions. How do the persons' suggestibility and perception change? How does it depend on their original hypnotic suggestibility? And what kind of images and emotions do they meet during their journeys?

Methods

Subjects

28 university students volunteered to participate in the experiment: 21 females and 7 males. They were given no money and no credit point for their participation. They were told that the experiment would be a shaman journey. *Procedure*

Subjects were asked to make an imaginary journey in the underworld, while listening to the drums. The instructions and the rhythm of drumming were in accordance with Harner's proposals (1997).

The instructions were the following:

"Shamans live in many places even nowadays. Once upon a time they played an important role in the life of our forefathers, too. They were healers, they helped to maintain the health of both the individuals' and the community's soul and body. They knew the effects of plants, they frequently used them in the course of

healing. There were shamans who had their visions by using certain drugs. Other shamans used drums in the course of their work. The drum was called the shamans' horse because they made their underworld trips by the help of drums.

In the next experiment you may take a journey of this nature. You'll hear drums similar to a shaman's drum. This drumming will help you in taking a journey into the underworld."

After this the subject was seated comfortably in an armchair and the instruction followed like this:

"Imagine a hole in the ground, something you've seen sometime in your life. This can be a childhood memory or something you've seen last week or today. Any kind of passage leading down is proper - a den, a cave, a hole in a treetrunk, a spring or a swamp, anything. It can be a man-made hole as well. The proper hole is the one which is comfortable for you and which you can imagine. Look at the hole for a while without entering, observe all the details...

When the drumming begins, imagine this hole, enter and begin your journey. Through this entrance go downwards in the tunnel. In the beginning the tunnel may be dark and dim, usually sloping moderately, but certain parts of it can be steep as well. Sometimes it seems to be ribbed and it bends many times. There are some who pass through the tunnel without perceiving it. Sometimes one finds a stone-wall or other obstacles in it. In this case walk around or find a hole on it to pass through. If you don't succeed, come back and try it again. Never make too much effort during your journey, because if you try it properly, you should succeed effortlessly. The most important in the journey is the moderate way of performing your actions, between making too much and less than enough effort. At the end of the tunnel you'll reach the surface. Observe the sight, make a tour and notice all its characteristics. Discover everything, until I am calling you back. At that moment come back through the tunnel, on the way you went down. Bring nothing with you from there! This is only a discovery. " (Harner, 1997. p. 57.)

After this the drumming has begun.

Measurements

The drumming lasted for 30 minutes, but after 15 minutes the test suggestions of the Stanford Hypnotic Susceptibility Scale form "B" were given the subjects (SHSS/B, Weitzenhoffer, Hilgard 1959)².

At the end of the experiment subjects were interviewed and the tape-recorded

text was written down for further content analysis. Subjects rated their subjective involvement, they rated the depth of their journey on a 10 points scale, where "0" means that they remained on the surface and "10" was the deepest possible point of the underworld. After this they filled out the Phenomenology of Consciousness Inventory (PCI, Pekala, Wenger, 1983.) for rating their subjective experiences. This is an instrument for retrospective measurement of subjective experiences on 7-point scales. Subjects rate the quantity of change in the perception of time, or in their body image, the degree of the vividness of their imagery, the pleasantness or unpleasantness of their experiences etc.

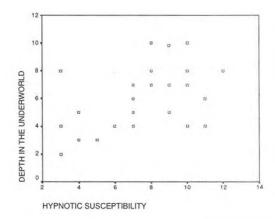
Separately, about one week later, the subjects' hypnotic susceptibility was measured with the Stanford Hypnotic Susceptibility Scale, form "A" (SHSS/A, Weitzenhoffer, Hilgard 1959)³.

Results

The depth of the journey

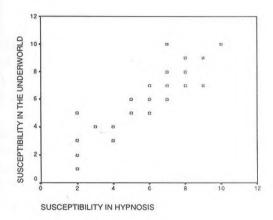
There were significant individual differences in the subjective involvement. The average depth was 6.03 sd = 2.45. The deepest point rated by a subject was "10", that is the deepest point of the underworld, from where one cannot go deeper; the least deep point was "2". The subjects' personal involvement was affected by their hypnotic susceptibility. The higher one's hypnotic susceptibility was, the deeper his involvement appeared. The correlation was significant (r = 0.55 p < 0.01).

Depth in the underworld and the hypnotic susceptibility The susceptibility for suggestions



Results show that, while listening to the drumming and taking their journey into the underworld, subjects became more susceptible to suggestions. They became susceptible to such a degree as if they had been in hypnosis, $r=0.55,\ p<0.01.$

Susceptibility in the Underworld and hipnosys Body image, space and the perception of time



Distortion of the body image was a general phenomenon. They could become very little to be able to pass through the roots, they could fly and sometimes they felt tiredness while they were sitting in a comfortable armchair in reality. The change of the body image was rated to 3 on the 6 point scale of the PCI (sd = 1,66).

"So, I was slipping, slipping for a while, through a lot of roots and there was very little space. And later it felt as if I had become a little smaller. And then there was enough room."

"And there was a moment, when I thought: still, I don't need to suffer, and than... moving up like a fish, so I could reach the surface, hence simply I started upwards... and thus there was an area I could go into. I reached the surface but I came down with the same motion, as if a had taken a breath."

"And suddenly I realised that I am like a flock, a piece of feather. And so, being a flock, I could descend on my back. So, turning my back to the deep... so I felt descending. For a long time, for a very long time... so slowly... so

gently... really, as if I were a flock... and that was very good for me."

There was a distortion in the subjects' perception of time. Practically nobody could estimate the length of the 30 minutes of the experiment, not even approximately. There was a person who perceived 3 minutes, while there was another who perceived 3 hours (means: 49.7 minutes, sd = 50).

Descending into the underworld - the question of effort

Results show that if someone makes too much effort, descending won't be successful.

"The first thing I did was trying to imagine the opening you asked. This would've been the entrance of the Sirok castle first, but I was not able to reach it, ...that was in a very high place, and I could not go up... I think I was not down that deep... But I was very conscious. I wanted to go by will." -Did you have any idea about that entrance in advance?

"Yes, I thought about this entrance at Sirok. That was what I have seen at the end, down, under me. I didn't succeed, I stayed at first, and was looking up, that I have to climb there. So, in reality I climbed up there many times, and I know the place, I even know where to put my legs, and then I was climbing and climbing, and it was very dark in there, and I couldn't enter because it was very dark."

According to the experiences of several journeys it becomes clear that the easiest way of succeeding is not through craving to get down at any costs, but through being open, being willing to go down if there is any chance to it.

"There was a little door made of oak. It was constructed of timbers, it was round... I looked around whether there was anybody seeing me and whether I could go down or could not. But suddenly, as if someone had pushed me, I fell down through it."

The Importance of the Drum

The drum seems to be a basic component of the shaman's journey. According to the subjects' reports, the drum takes over the leadership from the conscious ego, and like an inner centre of power, leads and controls the entering into the underworld, and the speed and direction of the journey.

Our research has supported the claim of shaman-cultures to a large degree that the drum is the "horse of the shaman", it is his carrier in his journeys.

According to the accounts of those people taking part in our investigation even the acoustic perception of the drum (or actually its rhythm) is changing. The steady rhythm applied in the research situation was perceived as changing by the participants of the experiment. It has slowed down, has become faster, dominant accords have strengthened and faded away. This imaginary change of the rhythm was often parallel to the speed of the journey, to the experienced emotions and the visual material.

"The music was changing. It has become faster and more intense. It was the most intense when I was crouching on the dolmen, and probably this urged me to go into the forest, for it had become faster and more impulsive and then I had to do something. It was imperative, as if it was saying: "Enough of crouching, get moving!"

"First I felt the music rather rough. However later on I felt it to be different. It sounded completely natural....as if it had not been a music outside of me, but something natural around me or inside me. It was also getting faster and there were beats and accords that were shortening and were following each other faster and faster. I was waiting for them to shorten completely so that they would become something else. Or that they would suddenly transform into something, or that there would be something very loud, a tremendous drumbeat, or something that would last forever."

"So, what happened was that I was standing next to a big...some kind of a big tree all alone, as if in a white veil, like in an almost transparent, muslin-like veil and that music...it just did not let me go away from that place."

In Trance?

In the anthropological and psychological terminology the interpretation of the notion of trance is rather vague. In this study we do not try to interpret this psychological phenomenon either, but by quoting these accounts we intend to refer to those situations that may indicate the development of states of trance during a shaman's journey.

"When you opened your eyes at the end, you said you felt very hot. What was the feeling like.

The fire at the end was very surprising. I felt it when I was over. At the place where I went down I was already out in the open air. Right after the music has stopped, there were like huge flames of fire. Then I felt as if I had reached the bottom, which I actually did not. However then I felt as if I had... I would have liked to stay there the best. However, then I had already been over it. It felt very strong and that was good. Then I was waiting for the music to play again."

The altered states scale of the PCI questionnaire showed a medium degree of change and relevant individual differences (x=3.42, sd=1.44).

The change in the state of mind is also indicated by the fact that, while hearing the drum and walking in the lower world, the participants were more susceptible to suggestions. The typical sign of deep regression was that those, taking part in the experiment, to put it in a little exaggerated way, almost forgot to speak. Starting their account of the journey they struggled hard to find the words and formed sentences that were grammatically incorrect. This grammatical uncertainty hasn't disappeared until the end of the accounts, when the conscious "I" could govern the verbal structures again.

Discussion

All the people who took part in the experiment had the same opinion that they had experienced something novel during their journey. All of them, except one who gave an uncertain answer, said they would be happy to take part in an investigation similar to this one in the future.

A major part of them were not invited to take part in the experiment but they themselves asked whether they could participate in it, having heard the accounts of their friends who were former participants. It seems that their first journey was a lasting and positive experience for them. They had had the opportunity to gain experiences about themselves in another spiritual dimension. That other spiritual dimension can be associated with the unconscious region of analytic psychology. The journey was a real one, incredible distances and depths of the psyche were accessible within a given time, often giving a sense of going somewhere, looking for something, finding something.

The psychic reality and authenticity of the visual and emotional experiences - however bizarre and irrational they seemed from the point of view of the conscious "I" - were not questioned by any of the participants of the experiment. Even with the help of rather superficial psychoanalytic references, they could more or less identify the travel-experiences bringing about vivid emotions with

former actual and many times traumatic situations in their lives.

In some cases the journey contributed to the personality development described as individuation by Jung, which contains the experiencing of the big ideas of life and the positive archetypes of the soul, as well as their integration in the conscious personality.

The most typical example of that is the travel-experience of one of the girl students, and its subsequent impact.

"Everything went on like that: I was walking on and on in a labyrinth and then there came like a big hall. That was a cavern. It was covered with soil and rocks and there was a throne at the end. A throne. There was nothing else. ...And I sat in the throne, I sat in it! And then people came in. But they weren't people, but like... well, they were people. And like they were dancing too. They were like in a big trance. And people were brought to me, and animals and I healed one, I made a bird out of the other. ...that one flew away and the third became a tree branch. ...And then I wanted it to rain. I don't know why I wanted it, but I wanted it and then I signalled like this, the way rain falls on the ground, and they like started moving, just like rain drops reach the ground and then it started raining up above. And I like designated a certain, well, not person in the crowd to go up and then he went up and came out as a tree or a flower..."

In the afternoon of the day of the experiment this girl said she had been thinking about what love and responsibility means in this world all day long, since her experience in the morning.

Concluding the results of the experiment we can say that the healing rites of shaman cultures had known and used that psychotherapeutic knowledge and experiences for thousands of years that the modern medicine began to rediscover only since the nineteenth century on. It is also overwhelming to see their natural skill for integration, that helped them to apply those experiences in unity, which form the basic principles of today's separate psychotherapeutic schools.

In traditional cultures the shaman, the patient waiting for a cure, his or her family, and often also the wider community, were all participants of the healing rite, furthermore the world of spirits was also involved. Today at least five psychotherapeutic schools keeps breaking this knowledge into parts and thus loses major part of the possible healing power: the Freudian analysis of the unconscious of the individual, Szondi's analysis of the family unconscious, the Jung-

ian analysis of the collective unconscious, the analytic group therapies and hypnotherapy.

In our research we have tried to model the healing rites of the shaman cultures the simplest way possible. Instead of the jungle or the sacred glade of the taiga we worked in the laboratory of the Institute of Psychological Studies, where there were not any campfires. The "rite" reached its culmination not at midnight or at dawn, but many times between two university lectures. Instead of the magic drumbeat we listened to the sound of a synthetizer from the cassette recorder. The members of the tribe, the family were not present, nor were the spirits of the ancestors in forms of a totem-pole or in some other symbolic form. We had not dressed into shaman-clothes, and the "potion" we offered to the participants was only coffee from the automata, downstairs. They, together with us, are only late twentieth century people. No-one knows whether the notions "sacred", "rite" and "spirit" mean anything to us. Still, magic came about and the participants of the experiment, who listened to our requests many times with a smile, returned from a real journey and never with empty hands.

Notes

1 Hypnosis is a method widely used in psychotherapy. It can be induced by verbal instructions, generally involving relaxing suggestions and imagery. It can be induced also by increasing the activation, for example by over-increased motion. The characteristic features of the altered state of consciousness induced by hypnosis are the following: the imagery is more vivid, there are distortions in the perception of space and time and the person accepts experiences contradicting usual normal logic. The other important characteristic of this state is that subjects become more susceptible to suggestions. In the consequence of suggestions they may experience, for example, that their arm is really so heavy as if they were holding a heavy weight in it, or they may become insensible to pain or may even vividly relive past experiences in imagery. The subjects' susceptibility for suggestion is differing, some of them experience less, others experience more suggestions.

2 The SHSS is a method most frequently used in hypnosis research. You can measure the subject's susceptibility for suggestions following a hypnosis induction. Subjects are given different suggestions e.g. they are asked to imagine that they're holding a heavy weight in their arm. There're some, who really perceive

the heaviness and in the consequence of this their arm is lowering. The reactions following the suggestions are evaluated. The value of hypnotic susceptibility is a number between 0 and 12. Because of technical reasons in this experiment the 3.-12. suggestions were used.

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