

INSTITUTE OF CURRENT WORLD AFFAIRS

ATW-38

Hot! Hot! - II: In the Sweat Lodge

Eugene, Oregon

March 12, 1975

Mr. Richard H. Nolte
Institute of Current World Affairs
535 Fifth Avenue
New York, New York 10017

Dear Mr. Nolte:

During the past month I have had a chance to indulge in one of my favorite activities, sweat bathing Indian style. Some friends came to visit in Arizona, bringing with them from northern California a portable sweat lodge that we set up high in a canyon in the Santa Catalina mountains outside of Tucson. We spent the whole afternoon in and out of it and felt so high and healthy at the end of the day that we decided to build a permanent sweat lodge for ourselves. We did so, using long, flexible ribs of the ocotillo, a large spiny plant of the southwest deserts, instead of the traditional willow poles. The effort was a success, and I was able to soak up enough heat to face the prospect of leaving the Arizona sunshine to return to the end of winter in Oregon.

Sweat bathing is a common ritual among North American Indians. It is both a hygienic practice and a religious one. As a religious ritual it is an intense experience that produces marked alterations in consciousness.

The sweat lodge is of simple construction: an open framework of willow saplings bent and tied together to form a circular hut perhaps five feet in diameter and three or four feet high. Over

Andrew T. Weil is an Institute Fellow exploring altered states of consciousness in our own society and elsewhere.

this framework are draped animal hides, canvas, or blankets so that the inside is completely dark and insulated. A shallow pit is dug in the earth in the center of the lodge. Participants in the ritual, usually from four to eight, depending on the size of the lodge, sit on the ground, unclothed. Attendants on the outside fill the pit with red-hot rocks that have been heated in a strong bonfire. The lodge is then sealed up from outside, leaving the participants in darkness and increasing heat.

Among the Sioux, the sweat lodge is consecrated ground on which man contacts the Great Spirit of the Universe. Sprigs of sage are placed among the willow poles, and cedar incense is burned on the hot rocks as the ceremony begins. The medicine man in charge of the sweat offers prayers for the efficacy of the lodge and the well-being of the participants. He passes around the sacred pipe filled with an aromatic mixture of tobacco and red-willow bark. Each person prays with the pipe and smokes it. The leader then begins his chants. When he is finished he starts to throw water on the glowing rocks.

The water contacts the rocks with an explosive hiss that seems to rock the lodge. Seconds later a wave of intense heat envelops the body. As soon as it passes, the leader adds more water, causing another explosion of sound in the darkness and another wave of intense sensation, stronger than the last. The process continues until no one can stand any more, at which point the shouting of a special phrase (meaning, "All my relations!") signals the outside attendants to throw off the coverings of the lodge, leaving it open to the winds. As soon as the participants recover, the lodge is sealed again, and another cycle of praying, smoking, chanting, and scalding takes place. A full ceremony may include four or five cycles of increasing intensity.

When the sweat lodge is used simply to clean the body of surface dirt or warm the bones in a cold climate, it is a pleasant

practice but one that does not transcend the ordinary. But when a powerful medicine man runs it as a serious ritual, it can be a life-changing experience.

I was introduced to the sweat lodge by Leonard Crow Dog, a Sioux medicine man of the Rosebud Reservation in South Dakota. The first time I was in the lodge I could not believe how hot it got. The sensation of live steam was so strong that I thought my skin was on fire, and I quickly learned that I had to keep wiping the sweat off my skin to avoid getting burned. (Water conducts heat to the skin faster than air.) It is possible to get first- or second-degree burns in the sweat lodge, but, interestingly enough, one's mental state seems to be the most important determinant of the fate of one's skin. Burning occurs only when you lose contact with the psychic energy of the group and see yourself as an isolated individual trying to defend yourself against the onslaught of heat. With trust and confidence in the medicine man and willingness to abandon yourself to the powers in the sweat lodge, physical damage does not occur, even though the sensations are as intense as anything you have ever felt and the temperatures in the lodge are near boiling for brief periods.

In the sweat lodge one meets and conquers many fears. All the terrors of darkness, noise, fire, and helplessness rise up to challenge the participants in the ritual and are defeated by the collective faith of the group. When the steam explodes from the rocks there is no time for thinking; all mental energy is focused on the wave of heat about to break. Dealing with that wave, receiving it, and riding over the crest take full concentration. The reward of persevering is a terrific high. At the end of a good sweat, people feel euphoric, lifted out of themselves, purged of anxiety and depression, healthy, and full of energy. On coming out of sweat lodges I have felt high in many of the same ways I have felt on using psychedelic drugs. These feelings last an hour or so and gradually give way to great relaxation and a desire to rest. Increased aware-

ness of one's own strength and a sense of well-being may persist for a long time.

The devices by which the sweat lodge brings about a high are worth considering. The act of entering the darkness of the lodge in the first place is a symbolic withdrawal from the ordinary world. The chanting of the medicine man brings about an initial degree of concentration, the prerequisite for many kinds of altered states of consciousness. Chanting, whatever its form, is a powerful technique to change awareness. It seems to work by occupying the ordinary mind that is usually busy thinking and paying attention to multifarious external stimuli. In a similar way the sharp noise of the steam focuses attention on a specific auditory sensation, increasing the depth of concentration.

But it is the intense waves of heat that carry this process to an unusual extreme. There is no question that the experience in the sweat lodge would be horribly painful to someone unprepared for it. Nor is there anything unusual about pain serving as the basis for alterations of consciousness. What is interesting about the sweat lodge is that set and setting encourage the participants to interpret this strong stimulation as good and healthy and that with this set and setting the sensation is one of pain that does not hurt. And what is more, this experience of pain that does not hurt leads to a powerful high in the complete absence of tissue injury.

Non-hurtful pain is well known in hypnosis and other trance states and with the administration of opiates. It is less well known in psychedelic states, but I have seen it occur there often, again leading to highs. Now, it is important to differentiate between the anesthesia of hysterical dissociation and the high experience of non-hurtful pain. A badly wounded soldier on a battlefield may perform heroically, unaware of his injuries. A mother, seeing her child pinned beneath a car, may lift the car unassisted and be unaware that she has suffered crushing fractures of her vertebrae

until she learns that the child is all right. In these cases intense emotion leads to a kind of trance state in which a barrier develops between nerve impulses from the body and awareness centers in the higher brain. Real injury has occurred, but the message of it does not make it through to consciousness for some time.

By contrast, in the experience of non-hurtful pain, full awareness of the body exists. Sensations are perceived as strong but not noxious, no injury results, and one feels energetic and high at the end. It is tempting to invoke something like hysterical dissociation to explain this experience, but that mechanism, while it can account for anesthesia, cannot explain the absence of tissue injury by stimulation that would certainly cause damage under other circumstances.

My first experience of this sort, some time before I ever sat in a Sioux sweat lodge, happened while I was under the influence of LSD. I found myself walking barefoot over a stretch of sharp stones near my house that I had never been able to walk on before. I was very aware of the pressure of the stones on my feet, but the sensation was simply strong and neutral. The experience was so novel that I explored it for some time, running back and forth on the stones and jumping up and down on them. Yet at the end of it I had not the slightest marks on the soles of my feet. A few days later, when feeling "ordinary," I tried it again but could not repeat my performance. Even a few steps on the stones hurt and left marks.

The Sioux sweat lodge, without psychedelics, reinforced my belief in the importance of this practice and motivated me to experiment further. Using LSD and MDA I found that under certain circumstances I could interact with fire, hot and sharp objects, and blows on the body of great force, suffering no injury and getting high from the interaction. The drugs did not automatically confer this immunity from damaging pain but simply made it more likely that the experience would occur; I still had to be in the right

frame of mind. After a number of practice sessions I found that I could reproduce the experience without drugs, especially if I were with others who had had it and used chanting as a means of producing the necessary state of concentration. I discern the following principles at work in this process:

1. There is a psychophysical state in which powerful sensations that would normally be perceived as painful and cause bodily damage do not hurt and cause highs.

2. Fear of the stimulus is the greatest obstacle to this experience.

3. The presence of someone who has experienced the state and is not afraid of the stimulus is the greatest facilitator of the experience.

4. A preliminary degree of concentration is required for the state to occur. Chanting, drugs, hypnosis, and, probably, many other techniques can bring about such concentration.

5. Concentration is greatly deepened by the stimulus, itself. During the experience of non-hurtful pain, all attention is on the sensations coming from the body with none on verbal thought. In other words, the activity of the ordinary mind is highly focused.

6. The high of this state begins during the period of intense stimulation and reaches a maximum after the stimulation ends.

I would like to offer a hypothetical mechanism to explain the experience of pain that does not hurt. A strong stimulus presents the body with a challenge of energy: thermal energy in the case of steam or fire, kinetic energy in the case of a blow. How the body deals with this energy depends on the state of the nervous system when the stimulus arrives. Under certain conditions the peripheral nervous system might be capable of receiving unusually large amounts of physical energy, transmuting them electrochemically, and conducting them away from the periphery to the central nervous system. In

the central nervous system, this energy could be discharged in some harmless way through the head or experienced as a high; the peripheral tissues, meanwhile, would be spared any adverse effects. Such receptivity of the peripheral nervous system could occur only in the absence of interference from above. Fear or an effort to defend oneself against the perceived threat of strong stimulation might create a condition of neuromuscular tension that would impair or prevent peripheral nervous receptivity. The energy of the stimulus would then not be able to flow into the nerves directly but would instead spill into the peripheral tissues causing damage and pain. The experience of pain would increase neuromuscular tension in a vicious cycle.

My interest in the potential of the human nervous system to interact with unusually strong forces has led me to review the literature on fire-walking as practiced throughout much of Asia and in some western countries such as Greece. There is much documentation, both written and photographic, of the ability of human beings to walk unprotected on red-hot coals or stones or through bonfires. There has been little scientific study of fire-walking, and scientists have generally sought materialistic explanations of the phenomenon. Some have proposed, not very imaginatively, that Asians have tougher feet than non-Asians or that they are simply deceiving Western observers in one way or another. Others have suggested that perspiration forms a thin insulating layer that protects the skin from the heat.

In view of my personal experiences with the sweat lodge I am less inclined to look for simple physical explanations of fire-walking. I note that the presence of experienced fire-walkers is necessary for the success of novices. Usually, participants in fire-walking rituals work themselves up to the main events by long periods of chanting and dancing. Certain Japanese Buddhist sects perform ritual walks over red-hot coals while chanting silently a particu-

lar sutra. I have interviewed several persons who have done this practice. They confirm the suppositions that concentration is vital, that a break in concentration (in this case in the rhythm of the chant) leads to burns, and that successful completion of the fire-walk results in a powerful high, marked by euphoria, energy, and new confidence in one's abilities and strengths. All of this evidence leads me to conclude that the true explanation of the ability to walk through fire lies in a different functioning of the nervous system brought about by a change in the relationship of mind to body.

These experiences not only are ways of getting high that suggest important lines of research, they are also methods of great practical value in the treatment of illness. The sweat lodge, for example, can change dramatically people's attitudes about their bodies, undermining the whole psychological basis of disease. I think it might be used successfully in the treatment of mental illness as well as physical, and I plan to experiment with that possibility in the near future.

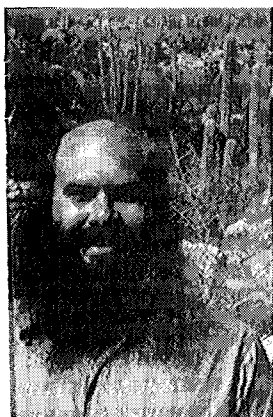
Sincerely yours,

A handwritten signature in cursive script that reads "Andrew T. Weil". The signature is written in dark ink and is positioned below the typed name.

Andrew T. Weil

Received in New York on March 31, 1975.

INSTITUTE OF CURRENT WORLD AFFAIRS



Andrew T. Weil has
been an I.C.W.A.
Fellow concerned with
altered states of
consciousness in our
own society and
elsewhere.

With this newsletter, ATW-39, Dr. Weil
concludes his ICWA fellowship.

R.H. Nolte
April 1975