

ENIGMA OF DRUG-INDUCED ALTERED STATES OF CONSCIOUSNESS AMONG THE !KUNG BUSHMEN OF THE KALAHARI DESERT

MARLENE DOBKIN DE RIOS

California State University, Fullerton, CA 92634 (U.S.A.)

(Accepted December 11, 1985)

Summary

This article examines data presented in Katz' book, *Boiling Energy: Community Healing among the Kalahari Kung*, particularly with regard to plant drugs present in the community during the 1968 visit. The author argues that the similarity of the Bushman trance state, *kia* and that of drug-induced altered states of consciousness has been paid too little attention in the research, and that an enigma currently exists with regard to the degree to which plant drugs may have influenced the !Kung trance phenomenon and healing beliefs. The author discusses the existing evidence for plant drug use based on Katz' research and the specimens currently on hand at the Harvard Botanical Museum herbarium, and presents a Table which contrasts drug-induced behaviors and ideologies of societies known or suspected to have used mind-altering drugs with similar behavior/beliefs of the !Kung. It is suggested that the influence of a number of psychoactive drugs may have played a much more pivotal role in Bushman behavior and belief than is generally acknowledged.

Introduction

In 1982, Richard Katz, a clinical psychologist at Harvard University's Graduate School of Education, published *Boiling Energy: Community Healing among the Kalahari Kung*, which documented a 3-month visit he made in 1968 to study the healing practices of these hunter-gathering peoples. His book, published almost 15 years after his fieldwork was completed, romanticizes one of the best aboriginal populations that anthropologists have been able to study in depth, to try to obtain an understanding of a fast-disappearing way of life. Katz follows on the heels of a number of scholars in the Harvard Kalahari Research Group, including Richard Lee, Irvén de Vore, Melvin Konner and Margarite Whiting, among others, who have published widely on diverse aspects of !Kung culture.

In reviewing this book recently for *Transcultural Psychiatric Research Review* (Dobkin de Rios, 1984b), I commented upon the similarity of the Bushman trance state, *kia* (and its behavioral and ideological correlates) and drug-induced altered states of consciousness which I have discussed in a variety of publications over the last 16 years. Upon further scrutiny of the data presented by Katz, and in conversation with him as well as my request for information from Dr. Richard Evans Schultes, of the Harvard Botanical Museum, I found some interesting aspects of !Kung trance states which have not been set in an appropriate context of analysis by those scholars who have published on this population.

Many writers, including myself, are interested in altered states of consciousness in the service of health. These altered states can be evoked in a number of ways in addition to the use of plant hallucinogens. In fact, the thrust of my recent research has been to use hypnosis to treat post-traumatic stress disorders among Spanish-speaking migrants in Southern California who suffer burn trauma (see Dobkin de Rios and Friedmann, 1985). In 1972, I wrote (p. 23):

... various writers have shown that chemical substances are by no means the only way that man has attempted to vary the pace of everyday life. Exercises, meditation, fasting, flagellation, hypnosis, trance phenomena induced by rhythmic dancing, musical chants and other activities readily spring to mind as means of achieving a different phenomenal reality. Whatever the value of such methods, hallucinogenic drugs, for the most part, have been a much quicker way to achieve states of altered consciousness, requiring less concentration or preparation than other cultural customs that have developed throughout human history.

However, there is a logic in arguing that plant hallucinogens in any cultural context must be considered in the evocation of altered states of consciousness. This approach necessitates several steps. First one must determine if data exists in a replicable form (e.g. botanical specimens available for analysis and replication in museum collections) that support the presence of psychoactive plants in a given environment. Secondly, are there self-reports of subjective experiences as well as symbolic configurations that exist in a given culture which are common to other societies of the world where plant hallucinogens have been utilized and described by scientists? If these conditions are met, then it is probable that the mind-altering properties of the psychoactive drugs have influenced ritualized behavior. Table 1 shows this in more detail.

The enigma mentioned in the title of the article deals with the issue of the degree to which a series of plant drugs, possibly hallucinogenic, may have influenced the trance phenomenon and healing beliefs of the Kalahari Bushmen today and in the recent past. As Katz points out, the setting in which he conducted fieldwork in 1966 (in the now independent nation of Botswana) is not a replicable one, since the forces of modernization and acculturation have been experienced by the !Kung and their traditional way

of life has changed. Thus, although I may be able to explicate the enigma, I am not sure that it can ever be resolved.

In this paper, I will first describe the trance behavior and healing activities of the !Kung Bushmen, and their beliefs concerning the *kia* or trance state. Then I will discuss the existing evidence for plant drug use among these people, based on Katz's research and the specimens currently on hand at the Harvard Botanical Museum herbarium. Table 1 contrasts drug-induced behaviors and ideologies of societies known or suspected to have used mind-altering drugs (Dobkin de Rios, 1984a) with similar behavior/beliefs of the !Kung. I suggest that the influence of a number of psychoactive plants may have played a much more pivotal role in Bushman behavior and belief than generally acknowledged.

The point of this article is not merely to fill in gaps in our knowledge of the historic role of drug plants in traditional societies of the world. More importantly, it may serve to demonstrate how cultural blinders of Western researchers result in avoidance or distortion of data that are not

TABLE 1

SIMILARITIES BETWEEN DRUG-INDUCED ALTERED STATES OF CONSCIOUSNESS AND KUNG BUSHMEN DANCING TRANCES

Belief/activity	Drug-using societies ^a	!Kung trance characteristics
Belief in aerial voyage of trancer	+	+
Experiencing of time as highly accelerated or imperceptibly slowed	+	—
Animals utilize drug plants and human beings learn by observation	+	—
Spirit helpers of plants are evoked by users	+	—
Death of ego/rebirth phenomena reported; fear of death	+	+
Healers divine the future and make prognosis of illness	+	+
Rituals associated with trance state	+	+
Music an integral part of ritual; song guides trance	+	+
Women involved in healing rituals general after menopause	+	+
Quality and intensity of altered state unpredictable	+	+
Man/animal transformations utilizing plant	+	+
Recruitment to shamanistic role is idiosyncratic, based on personal attributes; also may run in families	+	+
No metaphor of possession by alien spirit force	+	+
Hallucinogenic plants not given to pre-adolescent children	+	+

^a +, trait present; —, trait absent.

necessary. In particular, Western cultural values denigrate altered states of consciousness, especially those associated with drug use. These partisan beliefs color the perception of the role of these altered states in human history and traditional healing. We learn much from societies like the Bushmen where the cultural harnessing of altered states (possibly induced in the past by psychoactive plants) may have a value even to Westerners in their own cosmology of health — to wit, the growing use of imaging techniques in psychological health interventions and personal development (see Pelletier, 1977; Sheikh, 1984; Locke, 1985).

Trance behavior and healing among the !Kung bushmen

One of the last hunting and gathering peoples of the world whose culture has remained relatively intact until recent decades, the !Kung Bushmen of the Kalahari Desert practice a form of trance healing by means of dancing that is of great interest to medical anthropologists, ethnopharmacologists, botanists, psychologists and psychiatrists. The *kia* trance state, in which energy called *num* boils up in the individual, allows a healer to “pull sickness”. This *num* energy travels up the base of the healer’s spine to his head, to produce an experience of nothingness. Healers in the past danced and treated a sick person within a kinship group. Healing dances were held periodically throughout the camps where the !Kung congregate, although pressures of acculturation have changed life patterns dramatically. This includes a closer approximation of a “fees for service” healing model, similar to the West more than ever before. The healer, after an apprenticeship period of several years in which he/she searches for *num*, may enter into trance and learn to “pull sickness”. Healers tend to develop between the ages of 25 and 40, and Lee (1966) presented data that at least 50% of adult !Kung men and 10% of the women become healers. In the case of women, healing tends to occur most in post-menopausal periods.

Those healers who work with *num* adhere to strict dietary rules and avoid animal blood. All members of the society have access to healers, since almost everyone has a close relative who heals. The society is often classified by anthropologists as an egalitarian one, since there are no headmen, nor are any special privileges recognized. There is no belief expressed in possession of the individual by an alien spirit force while the individual is under *kia* trance. In fact, no change exists in the external status of the healer insofar as social recognition or material goods are concerned. Another belief that characterizes the *kia* trance is that to enter this state is dangerous, filling the individual with fear and pain. The teacher puts *num* into the pupil. When the *num* energy is in the dancer’s body, he cannot be burned by the fire. Singing during dances activates the *num* energy. Dancing is the way that the *num* energy boils, so that the person may enter into *kia*. One healer, interviewed by Katz, described a shamanic battle with spirits that he experienced under the *kia* trance. The healer said that he puts

the soul back into the sick person's body. Another healer told Lee that healers bear malice toward one another. An older healer told Lee that in the past, powerful healers turned into lions and stalked their enemy to kill them. That female healer first diagnoses the "thing" that is going to kill a person and only then does she heal the patient.

Evidence for psychoactive drug use

In 1966, prior to Katz's visit to the Kalahari, Marjorie Whiting collected plant specimens which are now deposited at the Economic Herbarium collection at the Harvard Botanical Museum. Schultes (pers. commun.) writes that the only psychoactive plant in that collection is *Pancratium* (which contains alkaloids). Katz, in a rejoinder to my review of his book, states that other plants were sent to the Herbarium, but they did not arrive. *Pancratium* is rubbed on sacrificed heads for a reaction. Neither Katz (1982) nor Lee (1966) mentions this plant. In fact, Lee mentions no specific plants at all. Katz does discuss two plants with which he wanted to experiment. The first was "*gaise, noru, noru* *Ferraria glutinosa* (Bak.) Rendl," which is occasionally used at dances as an aid in teaching *kia*. It is only available in April, after the rains. Older people used it at nights. In the past, Katz writes, that it was used as a teaching aid. Today it is the custom of the elders and the current generation is unclear as to how to prepare it. In my studies of the plant hallucinogen, ayahuasca (various *Banisteriopsis* species, see Dobkin de Rios 1972, 1981a,b, 1984a,b) which is widely used in the Peruvian Amazon, I found that drug-use patterns change as the result of acculturation and modernization. In the course of a restudy of drug-use patterns after an absence of 10 years from Peru, I found in 1979 that people under 30 years of age differed significantly in their knowledge and use of the ayahuasca plant when compared to a sample of people over 30 years of age.

A second psychoactive plant described by Katz, not archived in the Economic Herbarium, is *gwa*, an unidentified root which apparently has psychoactive properties. It is used in the Bushman Drum Dance to help induce *kia*. If Katz had not shown a personal interest himself in learning more about these drugs, it is likely that we would not have learned about their use historically. Oversights of the use of psychoactive drug plants by Westerners has been documented by me for the Australian Aborigines (Dobkin de Rios, 1984a). It is interesting to note that Marshall and Biesele (1974), in a companion study guide to a film that Marshall made in 1966 entitled "Num/Tchai. The Ceremonial Dance of the !Kung Bushmen", claimed that the Bushmen recognize and use 17 medicinal plants, although none of these plants were described nor their effectiveness noted by Katz, who found this to be beyond the scope of his study. The only other mention of such plants is cited in Katz (1973, 1976) when he wrote about a locally obtainable pharmacological agent, *sa*, which controls trance among novices. This drug was described by Marshall (1969:365) as follows:

When a woman is dancing in her capering style outside the line, she may occasionally dance toward a medicine man with a gesture of praise, encouragement, and appreciation, and she may toss *sa* powder on him. *Sa* powder, tossed or rubbed lightly on a medicine man, enables him to see more clearly where the sickness is in the person he is curing, and the *num* in the *sa* also keeps the medicine man from feeling excessively tired after a night of clapping.

Marshall wrote that this powder is sprinkled on visitors as a greeting, on medicine men for their well-being, and it is used as a cosmetic. The effects described may be that of *Pancreatium* mentioned above. Certainly the divinatory aspects of hallucinogenic use have been widely noticed and wakefulness also occurs along with hallucinogenic and stimulant drug use. Aya-huasca use in the Peruvian Amazon is marked by all-night rituals, and little need for sleep after drug use is reported by informants. Katz as late as 1976 had not had the plant identified, nor had he observed its use directly, although he did claim that it was useful in easing the half-death experience and facilitating entry into the *kia* state (see Locke, n.d.), as reported to him by his informants.

My research in the Amazon and analyses of the loss of drug knowledge among Australian Aborigines and the ancient Maya (Dobkin de Rios, 1974), as well as Wasson and Wasson's discussion of drug loss patterns among Siberian reindeer herders illustrate how easy it is to lose sight of important data when Westerners find themselves simply inattentive to information on drug use present or past (see Wasson and Wasson, 1957; Siskind, 1973).

Similarities between drug-induced ASCs and !Kung bushmen dancing trance

Similarities with drug-induced altered states of consciousness characterize !Kung trance behavior. From my analyses of both Katz (1982) and Lee (1966), I suggest similarities between the !Kung Bushmen trance motifs and the recurrent motifs found among societies where hallucinogens induce altered states of consciousness (see Table 1). These motifs derive from a report that I prepared in 1973 for the Second National Commission on Marijuana and Drug Abuse. During that time, I surveyed 12 societies of the world which utilized mind-altering drugs. A series of working hypotheses or motifs emerged from this study which can be used to predict the drug effect cross-culturally (see Dobkin de Rios, 1975, 1976, 1984a; Emboden and Dobkin de Rios, 1981).

The congruences in Table 1 are interesting to examine. One could argue that an alternative to the use of psychotropic drugs is involved, since trance states have been and still are achieved by shamans and others practitioners without the use of hallucinogens. Perhaps by following strict dietary rules the !Kung may have used dance (like Dervish monks or mendicants) to reach *kia* trances. It is possible that there is an overlap in recent !Kung tradition of drug-free practices of this kind and practices that make use of drugs.

The motifs in Table 1 can be said to occur among non-drug using peoples

as well as those documented by the author in her cross-cultural research. Given the changes in !Kung Bushmen Society, however, we cannot test this hypothesis further.

Conclusions

In this brief article, I have shown cause to suspect that the !Kung Bushmen trance behavior has been influenced by psychoactive plant drugs. Moreover, I argue that not only in past times, but even in the present, Western bias in the scholarly community against psychoactive plants creates an intellectual climate in which evidence for drug use in a society like the Bushmen may be ignored, disregarded or relegated to an unimportant footnote or comment. As my recent book, *Hallucinogens: Cross-cultural Perspective* shows, the study of transcultural psychiatry, shamanism or healing must recognize their important role in human history. Clearly, large numbers of societies, either through personal disciplines or psychotechnologies (see Tart, 1975) have altered normal waking consciousness in the service of health without the use of psychoactive plants. However, the responsibility of the scholar must be to include all available data without prejudice to one's own cultural biases or expectations.

Notes

The societies surveyed include the Australian Aborigines, the Reindeer Herdsmen of Siberia, the Plains Indians of North America, the Nazca coastal fishermen, the New Guinea highlanders, the Mochica of Peru, the ancient Maya, the Aztecs of Mexico, the Inca of Peru, the Fang of Northwestern Equatorial Africa and urban Amazonian Mestizos of Peru. In a review of the drug-related musics of the world, additional societies were included in the tally.

References

- Dobkin de Rios, M. (1972) *Visionary Vine. Psychedelic Healing in the Peruvian Amazon*. Chandler Publishing Co., San Francisco.
- Dobkin de Rios, M. (1974) The influence of psychoactive flora and fauna on Maya religion. *Current Anthropology* 15, 2, 147–164.
- Dobkin de Rios, M. (1975) Man, culture and hallucinogens: an overview. In: V. Rubin (Ed.) *Cannabis and Culture*, Mouton, The Hague.
- Dobkin de Rios, M. (1978) The Maya and the water lily. *New Scholar* 5, 299–309.
- Dobkin de Rios, M. (1981a) Socio-cultural characteristics of an Amazon urban healer's clientele. *Social Science and Medicine* 15B, 51–63.
- Dobkin de Rios, M. (1981b) Saladera. A culture-bound misfortune syndrome in the Peruvian Amazon. *Culture, Medicine and Psychiatry* 5, 193–213.
- Dobkin de Rios, M. (1984a) *Cross-cultural Perspectives on Hallucinogens*. University of New Mexico Press, Albuquerque.
- Dobkin de Rios, M. (1984b) Review of "Boiling Energy", by Richard Katz. *Transcultural Psychiatric Research Review* 30, 202–210.
- Dobkin de Rios and Friedmann, J.K. (1985) Clinical anthropology and Hispanic burn patients. *American Psychological Association Newsletter*, Division 30: Psychological Hypnosis, April 1985.

- Dobkin de Rios, M. and Katz, F. (1975) Some relationships between music and hallucinogenic ritual: the jungle gym in consciousness. *Ethos* 3, 64–75.
- Emboden, W. and Dobkin de Rios, M. (1981) Narcotic ritual use of water lilies among ancient Egyptian and Maya. In: G. Meyer and K. Blum (Eds.) *Folk Healing and Herbal Medicine*, Charles Thomas, Springfield, IL.
- Katz, R. (1973) Education for transcendence: lessons from the !Kung Zhu/Twasi. *Journal of Transpersonal Psychology* 2, 136–155.
- Katz, R. (1976) Education for transcendence. In: R. Lee and I. DeVore (Eds.) *Kalahari Hunter-Gatherers*, Harvard University Press, Cambridge, MA.
- Katz, R. (1982) *Boiling Energy. Community Healing among the Kalahari !Kung*. Harvard University Press, Cambridge, MA.
- Lee, R.B. (1966) The sociology of !Kung bushman trance performance. In: R. Prince, (Ed.) *Trance and Possession States*. R.M. Bucke Memorial Society, Montreal, Canada.
- Locke, R.G. (n.d.) The divine body: trance and psi in !Kung society. Duke University Mimeograph.
- Marshall, L. (1969) The medicine dance of the !Kung bushman. *Africa* 39, 347–381.
- Marshall, L. and Bieseke, M. (1974) *Num Tchai. The Ceremonial Dance of the !Kung Bushmen. A Study Guide*. Documentary Educational Resources, Inc., Boston.
- Pelletier, K. (1977) *Mind as Healer, Mind as Slayer*. Delacorte, New York.
- Sheikh, A.A. (Ed.) (1984) *Imagination and Healing*. Imagery and Human Development Series, Baywood Publishing Co., Farmingdale, New York.
- Siskind, J. (1973) *To Hunt in the Morning*. Oxford University Press, New York.
- Tart, C. (1975) *Transpersonal Psychology*. Harper and Rowe, New York.
- Wasson, G. and Wasson, G.P. (1957) *Russia, Mushrooms and History*. Pantheon, New York.