

## HISTORICAL PERSPECTIVE

Hopi Snake Handling<sup>1</sup>

Mischa Titiev

Department of Anthropology, University of Michigan

Ever since 1884, when the Snake Dance of the Hopi Indians was first described in detail, attention has centered on that portion of the ritual during which some of the performers carry live snakes, including dangerous rattlers, dangling from their lips. In reality, the so-called Snake Dance is only a brief public spectacle which comes as the culmination of a nine-day esoteric ceremony. Again and again, observers have wondered why it is that venomous reptiles are so freely handled, yet rarely is a Snake dancer bitten, and never has a fatality been reported among participants in the ceremony. Many theories have been proposed to account for this phenomenon, some writers attributing the scarcity of accidents to the remarkable skill of the snake handlers; others quoting members of the Snake Society who have claimed that they are immune to harm if their characters are good; and one author referring vaguely to a medicine which may stupefy the reptiles while they are being carried in the mouths of the performers.

On the whole, there seems to be little need for postulating the use of drugs or the possession of any extraordinary or mysterious quality to account for the relative infrequency of injuries to the Snake dancers. Such unwarranted “explanations” have been completely dismissed by L.M. Klauber, curator of reptiles at the Zoological Society of San Diego, who has expressed the belief that accidents are rare partly because most rattlesnakes bite far less frequently than is commonly thought, and partly because all reptiles tend to become lethargic and docile after they have been handled in captivity for a number of days. It may well be that Hopi dancers are fairly clever snake handlers, but, in Klauber’s opinion, they are bitten just about as often as would be the case among a comparable number of white men who had been trained to deal with snakes.



Participants in the Hopi “Snake Dance” handle with impunity several varieties of reptiles, including Prairie Rattlesnakes, the bites of which may have very serious consequences. Nevertheless, dancers are rarely stricken and never fatally injured.



Since 1884, when the “Snake Dance” of the Hopi Indians was first described in detail, attention has centered on that portion of the ritual during which some of the performers carry live snakes, including dangerous rattlers.

If it be granted that native performers are actually stricken by venomous reptiles from time to time, as our records reveal, how does it happen that they seldom show ill effects and apparently never suffer death? For example, J.W. Fewkes tells of a dancer who was bitten, presumably by a rattler. Yet, his “wound was not fatal, nor did his hand swell up, as ordinarily happens a few hours after such a mishap.” To this question the conventional answer has been that the Indians possess a secret medicine that serves as a potent immunizer or antidote. However, when tested in the laboratory, the Hopi remedy has failed to show any efficacy. This was established by Dr. George E. Coleman, who once managed to secure about a pint of the reputed Hopi antidote with which he conducted experiments on a number of guinea pigs. Unfortunately, the liquid was no longer fresh at the time that the tests were made, but under the prevailing conditions, Dr. Coleman concluded that “the antidote certainly does not neutralize the venom *in vitro*.”

Since there is no indication that the Hopi medicine possesses any therapeutic value, we must seek some other explanation for the lack of serious consequences when snake men are bitten by venomous reptiles. This brings us to the crux of our problem: Are the poisonous snakes defanged or “milked” of their venom at some time prior to the public portions of the ceremony? These points have been widely debated, and a review of the literature pertaining to the Snake Dance clearly reveals that the great majority of authors favor the proposition that the reptiles are not rendered innocuous by either of these methods. This attitude was first expressed in 1884

<sup>1</sup> Originally published in *The Scientific Monthly* 57: 44–51 (July 1943).

## Editor's comments

Snakes have long fascinated the general public, and the combination of snakes and religion appears especially fascinating, as the all-too-frequent TV “exposes” of snake-handling Christian sects or the endless fascination with Indian snake-charmers show. This is yet another example of this obsession, but it helps illustrate several important points. First and foremost, science is a self-correcting system. The words of famous scientists, such as rattlesnake expert Laurence M. Klauber, carry much weight — but will be overturned by actual data. True scientists will admit that they were wrong, as Klauber did in this case. Not only are scientists not perfect, they are also not immune from *wanting to believe*. Possibly, some of those who concluded that the ceremonies used “hot” snakes were guilty of this. Another possibility exists, however, and this is my final point. We have a tendency to want things to be either/or. Either the ceremonies were all true, or they were all fake. The author certainly falls in that category, but life often does not. Early snake charmers in India reportedly used intact snakes, but later ones moved to safer practices that required much less training. Possibly, some of the ceremonies recorded in the early literature involved un-modified snakes, leading trained experts of the time to conclude that they were legitimate, but practices might have shifted later. Most likely, we will never know.

Gad Perry

when Bourke wrote, “Let it not be imagined that these snakes were harmless, that their fangs had been extracted, ... we were all convinced that they had been subject to no treatment whatever.” Nearly twenty years later, Dr. Dorsey took a similar stand. “This much may be said with confidence,” he wrote, “there is absolutely no attempt on the part of the Hopi to extricate the fangs or in any other way whatsoever to render the snakes harmless.” Still another writer, one never given to understatement where the American Indians are concerned, waxes almost hysterical at the accusation that the Snake Dance is a fake because the reptiles have been made safe. “Any one who knows anything about rattlesnakes,” he maintains, “knows that they can not be rendered harmless except by killing them. For the snake dance, their fangs are not extracted ... the snakes are certainly not rendered innocuous.”

Such has been the prevailing opinion until recent times. While it is true that none of the authors quoted above had actually examined any of the reptiles carried in the dance, their conclusions have occasionally been given weight by the observations of trained herpetologists. At the Walpi performance of 1883, for example, an army doctor named H.C. Yarrow entered the snake kiva just before the public dance, selected a large rattler at random, and “upon prying its mouth open, he found the fangs intact and of large size.” Furthermore, at the conclusion of this same ceremony, two rattlesnakes were captured and sent to the National Museum where Dr. S.W. Mitchell reported that “Their fangs had not been disturbed.”

The view that the reptiles are not defanged received additional support from Klauber after he had witnessed the Snake Dance at Mishongnovi in 1931. During this performance, Klauber and his son independently noted two rattlesnakes (*Crotalus confluentus confluentus* [= *C. viridis*]) that revealed their fang sheaths when their mouths were open, an indication that the fangs had neither been removed nor cut short. On the basis of these personal observations, coupled with a thorough examination of the publications pertaining to the subject, Klauber concluded that “the case for the non-disturbance of the fangs is proven.”

Nevertheless, in the light of a mass of recent data, it is no longer possible to regard the issue as closed; for it can now be demonstrated that the Hopi do, at least on some occasions, defang their snakes. The first writer to uphold this viewpoint was E.S.

Curtis, who expressed considerable surprise at the lack of skepticism shown by many students of the Hopi, and who quoted an experienced snake performer to the effect that the rattlesnakes are “rendered absolutely harmless by the removal of their fangs.” During the course of a field trip to the Hopi in the summer of 1932, I encountered my first bit of evidence in support of Curtis’ position. Together with other members of the party of which I was a member, I was present at Oraibi when an elderly native, formerly enrolled in the Snake Society, voluntarily began to deprecate the ceremony because it failed to bring rain and because the snakes were defanged. In pantomime, the speaker showed us how a snake’s open mouth was rubbed up and down against something that protruded upward from the ground. At the time very little attention was paid to the old man’s remarks because he spoke so little English that we could not be absolutely certain of his meaning, and because he had long been a convert to Christianity and there was a possibility that he was seeking to discredit his former religion.

Several years later, this little episode took on an added significance when two similar reports of defanging were brought to the writer’s attention from other sources. Once again the information came from Christian Hopi, who, having abandoned their native faith, were now seeking to malign it. However, both men were giving their testimony to an official of the Office of Indian Affairs, and inasmuch as some of their evidence has since been corroborated by an unimpeachable investigator, it may well be that there are elements of truth in their depositions. One witness explained that he had been greatly frightened when he was ordered to catch the first snake during his novitiate, but that the snake chief had later revealed “that they had extracted the snake’s fangs, teeth and poison sacs before calling him up to bag it.” The speaker then went on to say that the operation was secretly performed with a hoe-like instrument, and that the poisonous snakes were examined prior to the dance to make sure that their fangs had not grown back.

A second witness, testifying in the same vein, gave additional details. According to his story, when he was a novice an experienced snake man named Satsiki had instructed him “to place his snake stick with the butt end in the ground, and the flat end in the air.” Satsiki then seized the snake just back of the head, squeezed its jaws, to force them open, and rubbed the jaws along the flat side

of Deponent's snake stick, thus breaking out the snake's fangs and teeth, and squeezing out the poison sacs. He then told Deponent: "This is the way we treat the snakes, so as not to be bitten." Later on in his testimony, this witness also claimed that the snakes are examined before the dance and are again defanged if necessary.

Such statements by renegades from their native religion might well be dismissed as biased and untrustworthy were it not for the fact that they have recently received striking confirmation in at least one instance. At the close of the Chimopovy Snake Dance on August 24, 1932, C.M. Bogert, now assistant curator of herpetology at the American Museum of Natural History, followed one of the performers and watched him liberate his quota of reptiles at a shrine. As soon as possible after the dancer had withdrawn, Bogert hurried to the spot and succeeded in capturing a single rattler which had not yet escaped into the open. His published account of this adventure is directly pertinent to our discussion:

"In the sanctum of a gully not far from the shrine, a stop was made to examine the rattlesnake in case anything were to happen which might not later allow us the opportunity to do so. From Klauber's observations, and from the accounts of most ethnologists ... I fully expected to find the venom apparatus intact. Therefore, it was something of a surprise, upon prying the snake's mouth open with a pencil, to find the fangs entirely lacking and obviously removed. With the object of learning something regarding the condition of the venom glands, pressure was applied with the thumb and finger to the proper region, but no venom, at least none recognizable as such, was forced into the mouth. Of course, with the fangs removed, it would be difficult to observe and identify a discharge of venom."

In order to have his own examination made in the field confirmed, Dr. Bogert later sent the snake to Klauber. Under date of September 16, 1932, Klauber sent a letter to Bogert which reads in part: "I pickled the snake last night and found as you had supposed that apparently not only the functional fangs had been removed, but all of the rudimentary fangs as well. In fact, it would appear that the sockets in the maxillary, which normally hold the functional fangs, were completely extirpated. This has been done with a knife as indicated by cuts rather than tears, and on the whole it was rather well done, if you forget the snake's feelings in the matter." Thus, within a period of nine months after he had concluded that "the

case for the non-disturbance of the fangs is proven," did Klauber cheerfully admit that the opposite was undoubtedly true in at least one instance.

Of course, as Bogert is careful to point out, the discovery of a single defanged rattler does not imply that all the dangerous reptiles are defanged; nor must we forget that Yarrow and Mitchell had found rattlesnakes which had not been operated upon. In the latter instance, however, there is still the possibility that the Indians had resorted to the simpler method of rendering the snakes harmless by "milking" them of their poison. It is significant that even at the time when Klauber was convinced that the Hopi did not defang their snakes, he had indulged in an interesting bit of conjecture on this score. "To my mind," he wrote, "the removal of the venom ... would be so easy and safe, and so much more difficult to detect, that this is a more plausible explanation of how the Indians handle the snakes so fearlessly and with so few adverse effects." He then goes on to state that the removal could readily be accomplished by letting the reptiles strike at some soft object, or by manipulating their venom glands.

This hypothesis finds support not only in the testimony of the Christianized natives cited above, but also in the words of a faithful Hopi. In an interview with Stephen in 1885, Wiki, an orthodox Hopi official, who had long served as Antelope chief of Walpi, remarked, "The snake whip is used to cause the snake to strike at it repeatedly and exhaust the venom. As soon as the venom sac is empty the snake straightens out, and he is then seized." Thanks to Wiki's authoritative testimony, it is plainly evident that even if the Hopi do not invariably defang dangerous reptiles, they may still render them harmless by a "milking" process.

Armed with the knowledge that the Hopi do, at least occasionally, take pains to make their snakes safe, we may now venture to read somewhat between the lines in a few of the earlier publications, in order to point out the strong probability that the members of the Snake Society have long conspired to hide their treatment of snakes from white observers as well as from their fellow tribesmen. To begin with, it should be explained that whereas the Hopi have sometimes permitted spectators to watch nearly the entire schedule of rites, they have usually managed to secure privacy just before the public dance begins, and on the occasion of snake hunts. For example, Bourke reports that he and his companions were allowed ready access to the snake kiva at Walpi in 1881, but just as the public exhibition was about to begin one of the old men persuaded them to leave lest their clothing be stained by the paint which the dancers were applying to their bodies. To anyone who has ever lived in a Hopi pueblo the old man's ruse is perfectly clear, for the one thing to which elderly Hopi are most completely indifferent is dirt of any description!

Even more revealing are the subterfuges employed to keep spectators from witnessing the snake hunts. Uninitiated tribesmen are kept away by a stock device of Hopi ceremonialism. They are warned that those who trespass on the hunting grounds will either be stricken with fatal swellings (a disease supposedly controlled by the snake cult), or else they will be forced to join the Snake Society, a contingency which is dreaded by the average Hopi. As for white men, either they are simply requested not to come into the neighborhood of a snake hunt, or else they are told that the presence of strangers will interfere with the success of the searchers. The language in which Stephen was forbidden to join a party of hunters is



Before the dance begins, dancers take an emetic (probably a sedative herb or hallucinogenic) and then dance with the snakes in their mouths.

particularly significant. “They say it will be bad for the young snake members who are to catch their first snakes today,” he comments. It is only when we recall the vivid testimony of the Christian deponents (vide supra) that we can fully appreciate why the presence of a white man would have been “bad” for the novices.

Perhaps the strongest “between-the-lines” testimony of all is to be found in the Reverend H.R. Voth’s account of an incident that occurred at Oraibi in 1896. When it was learned that Voth was bent on joining a hunting party, the older snake men became greatly upset. At first they merely insisted that his presence would make the search unsuccessful; then they literally begged him not to go along; and finally they offered to strike a bargain with him. As Voth relates their terms, “I could see and hear everything else, only I should do them the favor and not go with them on the snake hunt”; and when Voth agreed to these conditions, “a big burden seemed to have rolled from their hearts.”

On a different occasion, however, Mr. Voth did actually accompany a group of hunters from Oraibi. Unfortunately, he was afraid that he would not be able to keep up with the more vigorous searchers, so he elected to follow the old snake chief who was “entirely blind in one eye, the other one being very poor,” and another man who was also “old and feeble, and also nearly blind.” Needless to say, Voth saw no snakes captured, and we may imagine the laughter of the younger snake men at the prospect of Voth’s endeavor to discover their secrets by following a pair of feeble, dim-sighted old men.

By one means or another the Hopi Indians have generally succeeded in preventing outsiders from watching their snake hunts at close range. Only Stephen has published an eye-witness account, but it is evident from his report that the snake which he saw taken had first been found by a distant hunter who had then called the rest of the party to him. Had this man so desired, he could have operated on the creature before summoning the others to watch its capture — a trick which experienced Snake men apparently play on novices.

In one instance Dr. Fewkes showed Kopeli, head chief of the Walpi Snake Society, a hole in which he had noticed a rattlesnake, but Kopeli flatly refused to dig it out in his presence. Fewkes attributed Kopeli’s refusal to the great care with which he was trying



An Antelope Priest may help with the dance, sometimes stroking snakes with a feather or supporting their weight.

to “preserve this one feature of the ceremony, the capture of the reptile in the open”; but somewhat naively, Fewkes overlooked the possibility that Kopeli might actually have been afraid of a genuinely dangerous rattler. In support of the more realistic interpretation of this episode, we have Voth’s explicit statement that “At any other time except during the ceremonial days, the members of the Antelope and Snake Fraternity seem to be just as much afraid of a rattlesnake as other people.” On a number of occasions, Voth challenged snake men to pick up rattlers which he had discovered, but this “they very emphatically refused to do, saying that if they ... touched a snake while they were not ‘assembled’ they were just as liable to be bitten as any other person.”

As for the Antelope men, their fear of untreated rattlers may be so great as to border on the ludicrous. In one case Voth dared a friend of his, an Antelope Society member, to pick up a rattlesnake. When he refused, Voth struck the snake a blow, picked it up and began to pursue his friend who “dashed away and screamed, evidently in genuine fear, crawled ... under a wire fence, and ran away as fast as his legs would carry him.” It might be argued, of course, that the person whom Voth had so badly frightened was an Antelope man, and as such he may not have had the skill in handling reptiles that the snake men learn to acquire; yet, had this same individual been handed a rattlesnake by one of the gatherers at the public spectacle, he would have held it with apparent nonchalance as he sang and rattled in the fashion prescribed for his group.

### Summary and Conclusion

In the course of the Hopi Snake Dance the participants handle with impunity several varieties of reptiles including the prairie rattlesnake, whose bite may have very serious consequences. Nevertheless, dancers are rarely stricken and never fatally injured. This immunity results neither from the use of stupefying drugs nor from the employment of therapeutic immunizers or antidotes. Instead, the safety of the performers is achieved partly by making the snakes docile through careful handling in captivity, and partly by resorting to such devices as defanging and emptying the venom glands. Although the latter practices have been frequently denied by former writers, a review of all the evidence available clearly points to the conclusion that the Hopi can, and occasionally do perform such operations; perhaps with the metal-tipped digging sticks and feather “whips” which are part of the Snake Society’s equipment.

It would be unwarranted, in the present state of our knowledge, to claim that all the rattlesnakes used in the ceremony are made harmless; but on the other hand, it can no longer be maintained that the snakes are never treated or that the Hopi dancers are recklessly indifferent to the dangers of venomous snake bites. In all likelihood, future researches will reveal that the major operations are performed systematically, according to some pattern of ritual procedure that has not yet been discovered. Indeed, it is already reasonably certain that the greatest care is exercised to render rattlers innocuous on those occasions, like snake hunts, when novices are about to handle them for the first time. In my opinion, this is done both to protect the tyros from harm, and to inspire them with the necessary confidence so that they may perform in public with that air of calm indifference to great danger which makes the snake dancer a hero to his own people, and an object of awe and admiration in the eyes of white spectators.