

INTERIM REPORT

Age and Character of the Bighorn Sheep Headdress,
San Rafael Swell, Utah

By

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Background and Acknowledgements:

This brief update and interim report is based on the works of the following people: Alexander Rogers, Robert Yohe, Tim Riley, Chester King, Renee Barlowe and Alan Garfinkel. We hope to be able to formally publish something in the future that captures our research in greater detail than the present effort and with a fuller exposition of the varied research elements of this remarkable find. However, given all the other responsibilities and tugs at our time, we thought it rather important to at least provide this interim update - a report to inform those who have helped us with this project providing the results of our studies to date. We would also like to thank Michael Moratto, Don Austin, Richard Blalock, and James Bard for their significant financial contributions for our research.

Introduction

An amazing artifact, a prehistoric bighorn sheep headdress, is part of the Tommy Morris collection exhibited at the College of Eastern Utah, Prehistoric Museum in Price, Utah (Figure 1). The artifact was apparently found on the eastern edge of the San Rafael Swell near the Colorado or Green River. This region is home to both Desert Archaic and Fremont peoples and both regularly hunted bighorn sheep and created rock art imagery (both rock drawings and paintings) featuring horned anthropomorphs and bighorn sheep. The San Rafael Swell is also the core area for the distribution of Barrier Canyon Style pictographs (rock paintings), and all major river canyons in this area include painted rock art galleries containing anthropomorphs, some of which are adorned with what appear to us and other researchers as horned headdresses.

Background

The bighorn sheep headdress, as it appears in the display case in the Eastern Utah Prehistoric Museum today, is tied together with cordage and is decorated with fifteen *Olivella* shell beads. This present configuration is partially a reconstruction of what Tommy Morris and previous museum curators thought the headdress might have looked like when it was in use. It does not appear to be representative of how the artifact was originally discovered in the 1960s. Notes at the museum document that the headdress was found in two pieces with drilled holes in the cranium with about a half dozen *Olivella biplicata* shell beads scattered around it. Originally called the “Horned Headdress,” this object was initially loaned to the museum in 1969 from Tommy Morris of Price, Utah, along with baskets, snares, projectile points, beads and other artifacts.

In 1989 a special case was built for the headdress “with inner support for the horns to elevate the headdress off the floor of the case.” At this time archaeological curator, Pam Miller, tied the left horn in with “contemporary sinew” and “replaced 5 shell beads; 3 with new milkweed cordage and 2 with original cordage to duplicate a 1981 file

photograph.” Provenience for the discovery site of the artifact comes from a 1991 report that was crafted by unknown museum personnel and states that the headdress was found in the “Robbers Roost Ranch, Ekker Ranch near Green River, Utah. San Rafael Swell area.” Other notes on file at the museum testify to the fact that the object was previously studied by Julian D. Hatch of Boulder, Utah in 1990, but no report is on file. The object was also studied by Ray T. Matheny, Department of Anthropology, Brigham Young University in 1993, and was briefly mentioned in an article on Nine Mile Canyon rock art (Matheny et al. 1997:72).

Research Problem and Significance of the Study

Since no formal study of this remarkable object has been completed, a study of the headdress was begun. Incorporated into that study were plans for dating the object, describing it in finer detail and placing the object in its proper anthropological and archaeological context as to possible meaning, function, and cultural affiliation. The rationale for this study is primarily the rarity of such a find in the archaeological record (and in a related way) to help clarify and correct some of the assertions made in the literature concerning bighorn ceremonialism.

To our knowledge, we are unaware of any other discoveries of bighorn headdresses in a prehistoric archaeological context anywhere in the Great Basin or the American Southwest. This may be one of the only such examples that has survived. The uniqueness and importance of such a find cannot be overstated.¹ Surprisingly, some researchers have asserted that such a bighorn sheep headdress could never have existed.

Keyser and Whitley (2006:19) assert that a sheep horn headdress is impractical and likely could not have been fashioned. They posit, because of the weight and configuration of bighorn sheep horns and the heaviness of the crania such a disguise or ceremonial regalia would have been nearly impossible to fashion. As such, it is very important that we detail exactly how such a costume element was created.

Additionally, David Whitley argues that the depictions of horned anthropomorphic creatures in rock drawings and paintings were not meant to represent disguised or adorned humans. Rather, Whitley argues that they were self-depictions of shamans memorializing visions of themselves as animal-humans during encounters with the supernatural. Therefore, the description and analysis of the Green River bighorn sheep headdress would provide some greater understanding of the role of bighorn ceremonialism in the course of Great Basin and American Southwest indigenous religion (see Garfinkel 2006 and Yohe and Garfinkel 2012).

There is considerable controversy surrounding the role of hunting cults and large game procurement in the prehistoric Great Basin. Pre-Numic groups and other non-Numic Southwestern indigenous cultures appear to have at times emphasized large game and

were especially focused on the hunting of bighorn sheep. Ritual rock art traditions, animal ceremonialism (cf. Yohe and Garfinkel 2012), and hunting cults appear to have been characteristic of some Pre-Numic foragers (cf. Garfinkel 2006).

Based on the notes assembled at the Price Museum, the Green River bighorn sheep headdress was cached in a rock shelter or stone crevice. Given such a placement, this might imply that the aboriginal culture responsible for fashioning the headdress regularly participated in long distance movements directed towards a limited set of high return resources and planned to return to the discovery site to use it again (cf. Bettinger and Baumhoff 1982:499). As such, it is possible that the headdress was associated with a Pre-Numic group either the Fremont or an Archaic culture represented in eastern Utah rather than a more recent Numic population.

It has been remarked that high levels of representational rock art are only associated with the Coso, western Anasazi, and Fremont people (Gilreath and Hildebrandt 2007:18) in the far western United States. It appears then that early Uto-Aztecs may have had higher degrees of sedentism, territoriality, and an unusual level of sociopolitical complexity. The latter may have allowed for a cultural florescence associated with manifestations of representational rock art. Such naturalistic rock art depictions might have logically been accompanied by elaborate ceremonials and heightened ritual activity.

Description of the Headdress and Identification of Construction and Design

According to a prior published description (Matheny et al. 1997:73), the bighorn sheep horns were reported to have been divided in half to minimize their weight and were then sewn to the skull to ensure permanent attachment. *Olivella* shell ornaments were attached to this headdress and the regalia may have been used with a hood. It has been hypothesized that such a headdress could have served either as a ceremonial accouterment or as a more utilitarian hunting disguise (Matheny et al. 1997:73, Figure 2).

This description will in future papers be further evaluated and the headdress studied more extensively to determine how it was fashioned, what post-mortem modifications to the sheep skull were made to allow it to be manufactured into a headdress. The skull will be evaluated as to the species of sheep, age of the sheep when it died, and its gender. Upon initial assessment, the horns are indicated as relatively small and appear to be either Rocky Mountain bighorn or perhaps a small or young Desert Bighorn (*Ovis canadensis*) with a 1/2 to 3/2 curl.

Animal Ceremonialism and Mountain Sheep Imagery

A recurrent motif in rock art worldwide is a depiction of a figure (animal-human conflation) adorned with a mountain sheep's horns (cf. Garfinkel 2006). This suggests a ritual where a person would take or meld with the spirit identity of the sheep. The idea of

transformation from a human to animal is common to hunter art worldwide. Hunters are attuned to the qualities of animals and they become symbols for agility, survival, and power over one's enemies. Increase rites and world renewal ceremonies regularly feature dancers in animal costumes, masks, and headdresses. These animal costumes include headdresses and body suits employing the skins and also heads and horns of large game animals (Figure 2)

If it were the intention of the headdress manufacturers to magically control the habits of the bighorn sheep, ensuring success in the hunt, then wearing the skin, crania, and horns and drawing bighorn images would certainly be a sensible way of getting into the mindset of the mountain sheep. It appears that in some cultures bighorn were also thought to be Spirit helpers or animal guardians. People would attempt to communicate with the animals through telepathy, and that this process would routinely produce concrete expressions including personal health, success, and physical rewards.

Hultkrantz (1986:633) indicates that spirits, sometimes in animal disguise, were some of the supernatural beings that were recruited by Numic individuals to provide them with success in hunting. Nevertheless, ethnographic references attest that the head and horns of sheep were also used as hunting disguises for the Great Basin Numic Paiute and Shoshone peoples (Matheny et al. 1997:72; Steward 1943a:294; Stewart 1942:242).

Rock Art Depictions of Bighorn Headdresses

Throughout the Coso Range of eastern California there are numerous (n = 200+) anthropomorphic figures wearing what appear to be bighorn sheep headdresses (Grant 1985:28-29). Many of these images appear to be humans wearing mountain sheep headgear (Figure 2). In other cases they are better identified as animal humans with avian feet and are more akin to animal-human (therianthropic) supernaturals.

In northern New Mexico (Largo Canyon) there are petroglyphs and paintings of bighorn headdressed humans in ceremonial attire (Grant 1985:28, Figure 2.9a). Similarly in the Cornudos Mountains of New Mexico and at Hueco Tanks, Texas there exist several depictions of bighorn headdressed ritualists (Grant 1985: Figure 2.10 and 2.11).

A number of rock art panels found in the vicinity of the Green River bighorn headdress discovery site contain striking representational imagery attributed to the Fremont or the more ancient Archaic cultures. Some of these rock art panels include elements depicting horned humans in ceremonial attire or supernatural therianthropic figures (conflated representations having animal and human qualities) with sheep horn embellishments.

The rock art of the San Rafael Swell and eastern Utah appears to support hypotheses about shamanic hunting rituals using a bighorn sheep headdress, and may link some

ethnographic traditions to the prehistoric past. Sheep horned headdresses are common in the local rock art, especially during the late Archaic, transitional and Formative periods.

Barrier Canyon style rock art (Figure 4) dates to approximately 3000 to 1500 years ago (and possibly as early as 5000 years ago). It commonly includes large wispy, limbless figures with wavy lines, animal familiars, snakes and birds, and these figures are often interpreted as spirit figures, shamans or hybrid animal-humans (Cole 1990; Kelen et al. 1996; Schaafsma 1971).

Some of these figures are adorned with what appear to be bighorn sheep headdresses. Large images of bighorn sheep with curled horns are a characteristic element of this rock art style, as are sheep horns on snakes.

Often anthropomorphs hold snakes in their hands or mouths, or perhaps have snake tongues, and sometimes have bird feet or other animal attributes. As a result, bighorn sheep horns may also be interpreted as indicative of a highly stylized animalistic tradition, rather than identified as more realistically depicted headdresses per se. Barrier Canyon style anthropomorphs have a consistent pattern with large goggle-like eyes - these could be face-on views of a person wearing a headdress with horns that have full curls. Other images in the Barrier Canyon style have side view and partial curl headdresses as does the game caller panel and the imagery in Thompson Springs.

Ethnographic Accounts of Bighorn Headdress Ceremonialism

A number of ethnographic and ethnohistoric accounts of indigenous Southwestern and Great Basin peoples document rituals and oral traditions that prominently feature bighorn supernaturals. In general, the mountain sheep or bighorn sheep was seen as a powerful animal by Native American hunter-gathers and farmers in these regions, and seems to be symbolic of abundance, fecundity, and hunting success. They are ubiquitous in the rock art of this region.

Eastern Utah was home to several Ute tribes, or *Nuche*, when Spanish explorers first visited in the 1700s. The region where the headdress was found was probably Ute territory, though also close to the area frequented by Southern Paiute bands from the Kaiparowits Plateau region. The closest local Ute band, the *Sheberetch*, was more isolated and “far more desert-oriented” than their mountain and lake-dwelling neighbors (Duncan 2000), and had little contact with EuroAmerican settlers until the mid-1800s. Ethnohistoric accounts describe the lifeways and worldview after the adoption of the horse, the tipi and some cultural attributes of Plains tribes, although most people still hunted mountain sheep and other traditional game, they also conducted rabbit drives with nets, fished, and hunted birds with snares. (Calloway et al. 1986; Duncan 2000). Prior to

the adoption of the horse, *Nuche* were culturally and linguistically similar to Southern Paiute people.

In some parts of southern Utah, mountain sheep were hunted year-round by Southern Paiute bands (Kelly 1976). The Southern Paiute had special "game-dreamer" songs and dances associated with hunting deer and bighorn sheep called a "*niavi*" (Kelly 1976, Kelly and Fowler 1986). The mountain sheep song was given to the singer in a dream, a gift from the mountain sheep. The "dreamer-singer" would dream about killing game, food for sheep, rocky places, rain, bows and arrows, and sometimes arrows turning into male mountain sheep (Kelly and Fowler 1986:384-5).

Some Southern Paiute bands would sing to attract sheep, or have a feast and gather around the singer in a partial circle, lay bows across their bellies and drape arms over them, arching their arms and holding their fingers in front of them like sheep hooves, marking time to the music. Some also had dancers who would jump and mimic bighorn sheep. The "dreamer-singer" would then direct them to a place they would find and hunt the sheep. This was one of the four principal Paiute songs.

The Mescalero Apaches may have been the authors of the horned humans depicted in rock art in the Cornudas Mountains, New Mexico and at Hueco Tanks, Texas (only about 40 miles from each other). These are thought to be representations of one of their supernatural beings identified generically as Mountain Spirits. Masked and costumed ritualists, impersonating these spirits, figured prominently at important ceremonies and these ritualists wore bighorn sheep headdresses (Grant 1985:32-33; Kirkland and Newcomb 1967)

The Navajo of the Gobernador District in northern Mexico have an important deity known as *Ghanaskidi* (Reichard 1950). These gods are in charge of the harvest, plenty, mist, and mountain sheep and they make these resources available to the people. *Ghanaskidi* is one of the most frequently depicted deities in the Navajo pantheon both in rock art and sand paintings. Bighorn horns grow from his head. *Ghanaskidi* is the owner/ controller of bighorn sheep (animal master) and plays a prominent role in mythology as a humpback deity bearing the seeds of all vegetation and also controls mist. This deity is a principal in the Night Chant healing ceremony. Rock art imagery from Largo Canyon depicts this immortal with a sheep horn headdress, staff, and feathered back.

The Hopi of the American Southwest have a secret society or sodality known as the *Ahl*. *Ahl* members wear the involuted horns of the mountain sheep on their heads and this fraternity directs the November New Fire Ceremony (Figure 3). This horn society (*Al*, *Ahl* or *Ala*) or hunter's society is called *Shayaka*, *Sayaikha*, or *Shayaika*, or something similar, *Sutikanne* in Zuni. These men's fraternities were responsible for initiations that

brought men to adulthood. A photograph of their ceremonial attire attests to the fact that they wear an actual sheep's horn headdress.

According to Titiev (1992) the Hopi of Third Mesa had an initiation with the Horn Chief/Sun Watcher leading men from both the *Al* (horn or two horn) and *Kwan* (agave) societies, and the *Tao* (singers) and *Wuwutcim*. *Wuwutcim* is the principal society there. The ceremony is complex, lasts for nine days, and members from the *Al* society participate in patrols and varied ceremonial roles, and at one point imitate the behavior of bighorn sheep.

The Horn Chief (leader of the *Al* society) wears the two-horned headdress and lights the kiva fires. They re-enact the Hopi emergence into this dry, fourth world, soliciting the ancestors for "rains, health, abundant harvests," feasting their dead ancestors, and this is also a rite of passage for young Hopi to become men. So this is symbolic of both the beginning and the renewal of life.

At the close of the ceremony, four *Al* society members reverse their horned headdresses, build bonfires, and again mimic the behavior of bighorn sheep (Titiev 1992). Recent discussion with Hopi Elders provided some insights regarding their reactions to the Green River Bighorn Headdress under discussion here. The elders said the headdress was for use with the two-horn society on Third Mesa. They basically conveyed that the headdress is very powerful, has powers for healing, but also that one needed a very, very powerful person to use it. If the headdress was not employed properly, in a ceremonial context, it could be very dangerous and bad things could happen.

A repeating theme in the Pueblo Indian literature, at Isleta, Santo Domingo, Santa Ana, Zia, Santa Clara, San Felipe, Laguna and others, is that the leader of the local hunter's society, is responsible for the successful reproduction of game animals, which usually included bighorn sheep (Ortiz 1979). Traditional pueblo cultures also had other rituals to ensure fertility, organize and bless hunts, and for a successful hunt. Several had a "Buffalo Dance" with dancers in buffalo, antelope, deer and bighorn sheep headdresses. Some made and distributed small animal fetishes or *pahos*/prayer sticks. In one community the hunt chief was required to plant small animal fetishes in the mountains, in a ceremony mirroring the ritual planting of maize and crops, to ensure the reproduction of game.

Sometimes such ceremonies were associated with Mountain Lion or Coyote, and there were versions at both the pueblos of the Hopi and Zuni. These rituals became less important by the mid 1900s, along with a decrease in the importance of hunting. At a few pueblos they stopped entirely by the 1970s, but traditionally most communities held ceremonial dances, usually in the fall or winter (November through March, prior to the equinox) and often in ceremonial regalia that included the headdresses of the animals.

Hence we have a number of examples of possible analogs for the incorporation of a sheep horn headdress in the religious rites of Native peoples in the Great Basin and the American Southwest.

Interim Results on Dating and the Cultural Affiliation of the Headdress

Radiocarbon Age

Given the need for more accurate dating of the headdress, discussions ensued with the analysts at Beta Analytical Radiocarbon Laboratories. It was decided that the most accurate dates would not be on bone or shell but on the textile materials - that is the milkweed cordage that served to attach the beads directly to the bighorn sheep cranium.

The radiocarbon age for this material provided a measured determination of 720 plus or minus 30 years before present (BP) with a conventional age of 950 plus or minus 30 BP. With a 2 sigma calibration, that radiocarbon date converts to a calendar age of AD 1020 to 1160 (cal 930 to 790). That date is closely congruent with the shell bead age determined through seriation on burial lots in southern California and the close correspondence of the ages associated with the beads in prehistoric archaeological sites in the American Southwest and in California (see below).

Olivella* Bead Ages for the Split Punched Bead Type by Chester King*

Fifteen *Olivella biplicata* shell beads were associated with the sheep horn headdress. Two of these beads were mailed to Topanga Anthropological consultants. Photographs of the beads are included below. All the beads appear to be of the same forms. Both beads that were mailed and studied by Chester King were made from *Olivella biplicata* shell. They were perforated by punching holes in the shell walls.

It appears that split-punched bead types (Bennyhoff and Hughes types D1, D2) are post Chaco i.e. after AD 1150. 120 strung split-punched beads are displayed at the not too distant Coombs site whose very northern Puebloan occupation dates to AD 1160-1235. A date between AD 1150 and 1160 is within the two sigma radiocarbon date calibration.

Gifford reported split punched beads from Wapatki in PIII context and punched beads are not reported from Lost City sites that were abandoned around AD 1150. A drilled bead similar to the beads used on the headdress was found in a Chacoan context at Aztec Ruin and dates between 1110-1150. It appears likely then that split punched beads were made between AD 1150-1250. It is possible, in fact, they were used for a period as short as 50 years, say between AD 1150 and 1200.

If so, then these beads and the headdress would be associated with the Fremont Cultures in the area. Beads traded to the Fremont and Southwestern Pueblos were often modified after they left California. Some modification was the result of smoothing and polishing of the rough edges from wear while being used in parts of necklaces, belts, ear rings or arm,

wrist, or leg bands or attached to animal skin or cloth objects. Other modifications included grinding of margins, grinding and polishing the faces of beads and sometimes cutting beads into pieces that are then made into new beads.

Few punched beads, such as these, when found in Chumash sites have any grinding on their margins. When viewed from the dorsal (or concave) side, the smooth edge on the right side of the bead is formed by the outer edge of the shell opening. The other edge is formed by the break that removed most of the callus.

Bead making refuse from Pitas Point (CA-VEN-27) indicates that split-punched beads were made by first punching a hole in the back of a large *Olivella biplicata* shell.

Two punched beads from sheep horn headdress collection. Both have ground edges. One is somewhat rectangular and could be classed as Bennyhoff and Hughes as their D2, although the rectangular beads in their illustrations have sharper corners. Edges of these beads were probably ground during their journey to Utah and possibly immediately before their placement with or on the headdress.

It will be important to discover if there were Fremont occupations that date later than the use of punched beads. Possibly the end of large *Olivella* bead manufacture at the beginning of the Southern California Late period and might be hypothesized as the result of the loss of the Utah market. The Fremont and Carson Sink people may have been the main consumers of punched beads.

Cultural Affiliation and Prehistoric Cultural Context

The most difficult part of our study is to an attempt to discern the meaning and precise function of the headdress. This component of our study will focus on questions relating to how sheep hunting played into subsistence and ceremonial life of the prehistoric peoples who employed the headdress. Further, how does the headdress relate to the rock art in the immediate vicinity of the discovery site?

A principal question is what sorts of images were being rendered when the horned headdress was made and used? Are there rock paintings or rock drawings dating to the time of the headdress that are located in the vicinity of the discovery site that could help us identify the cultural context of the find? Were there any other ritual objects discovered in an archaeological context (at the Price Museum or in the anthropological literature) that date to this time span that might have been used in association with the headdress? Chester King (personal communication 2008) suggests that dancers donning animal costumes, sometimes used a whistle or flute and employed rock art images as a means of teaching the uninitiated the dances and other various elements and themes of a religious ceremony.

It seems likely that the headdress was part of the Fremont religious repertoire and was highly venerated and valued. The use of rare *Olivella biplicata* beads and the secreting

the object into a small rock crevice or shelter, all seems to point to ritual significance. However, was this an exclusively religious headdress? Could it have also been employed by a ritual headman or a hunt leader as a disguise?

Such questions are difficult to address. We do know that the headdress was fashioned from a young bighorn and that the horns were hollowed and cut in two to reduce their weight. It is certain, that without any doubt, the sheep horn headdress attests to the considerable symbolic import of bighorn sheep to the Fremont people.

Notes:

1. Another possible bighorn sheep headdress is recognized. That artifact was found near Capitol Reef National Park (Allen 2002). This second possible bighorn sheep headdress consists only of the horn cores attached to a drilled and cut skull cap, so identification as a headdress is somewhat tentative.

** This material on shell beads and dating and typology is excerpted from the report authored by Chester King. I also employ his photographs and much of his narrative.

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Figure 1. Green River Bighorn Sheep Headdress as exhibited in the Eastern Utah Museum.



Figure 2. Coso Representational petroglyph with bighorn sheep headdress adorning hunter of a bighorn sheep. Hunter is using bow and arrow and dates to a time ca. AD 200 to AD 1000/1300. Sheep Canyon, Coso Range, China Lake Naval Weapons Center, Ridgecrest, California.

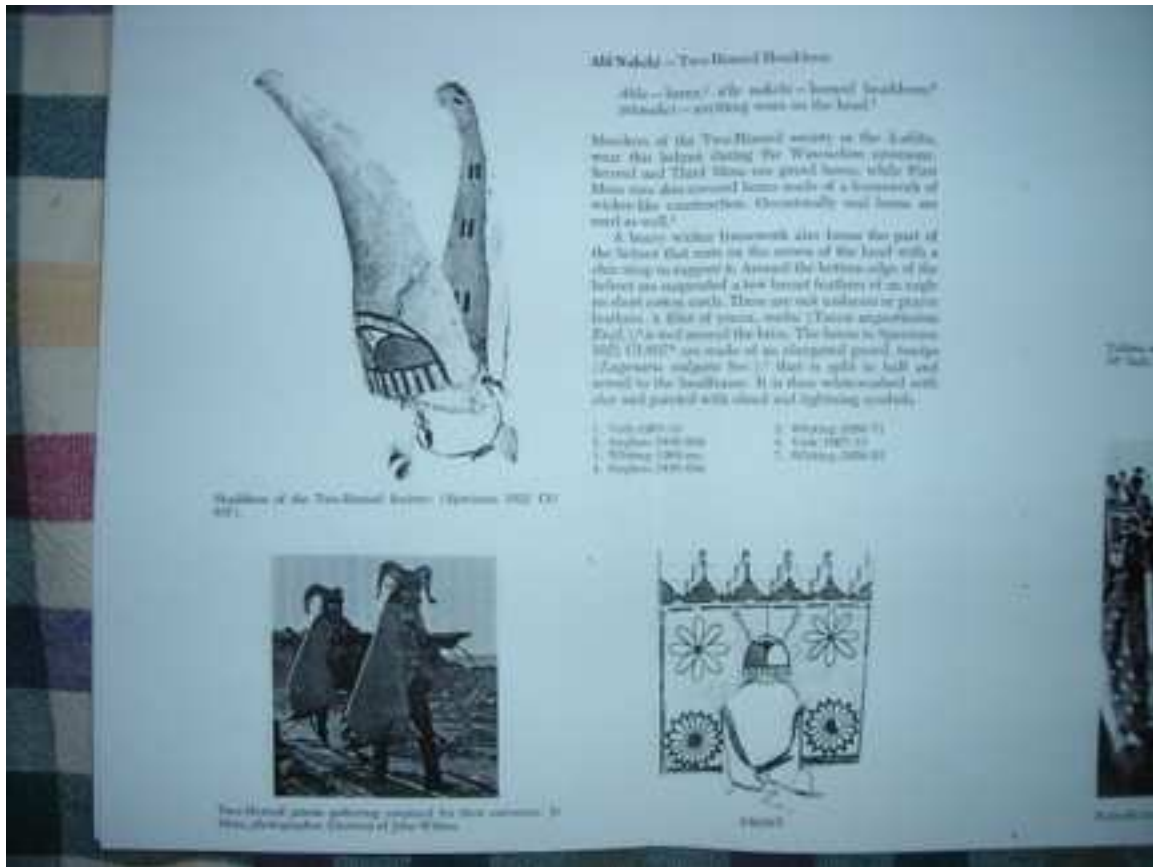


Figure 3. Two horn ceremony (above) as depicted in early ethnographic account of the Hopi ceremony.



Figure 4. Bighorn sheep headdress depicted in the early 1900s in a Native ceremonial - I am not sure of the ethnic identification of this ritual dance.



Figure 5. Barrier Canyon pictograph with animal-human figure, horned sheep head, bird legs and feet, snake tongue, long animal tail. Sheep appear her to having been called by the supramundane being, since it has in hand both a sheep and another figure. The sheep are moving up to the animal-humans right and left. Also another line of animal is circuitously moving up the being below its right hand.



Figure 6. Navaho rock art depiction of horned deity apparently relating to the harvest of corn, seeds, and renewal of the earth. The pack on the back of the figure is said to contain mist or seeds. The track to the right of the main figures is an imprint of a bighorn sheep track (hoof). The staff or wand is part of the ritual paraphernalis and the concentric circles relates to a supernatural portal for the being.



Figure 7. Contemporary painting of two horned headdress dancers in a Pueblo Ceremony mimicking the pattern of bighorn sheep gait with their hands and feet.



Figure 8. Two *Olivella biplicata*, split-punched beads from the Green River Bighorn Sheep Horned Headdress. All bead photographs on the top line and those in the 2nd and 4th position below are considerably enlarged to show details. The actual size of the beads are shown with scale below the top in the first and third position. The Third picture shows some of the native twine that was still attached to the headdress.

