THE HOPI TRIBE

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November 29, 1994

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Mr. Dave Wegner, Program Manager
Bureau of Reclamation
Glen Canyon Environmental Studies
P.O. Box 22459
121 E. Birch Street
Flagstaff, Arizona 86002-2459

RE: Glen Canyon Environmental Studies
Cooperative Agreement No. 1-FC-40-10560

Dear Mr. Wegner:

Enclosed is the September 1994 Progress Report Appendix A, Bibliography of Annotated References For Hopi Research. This report is to be included in the Progress Report submitted to you on November 7, 1994.

Should you have any questions regarding the report, please do not hesitate to contact Leigh Jenkins or Kurt Dongoske, Cultural Preservation Office, at 734-2441, extension 202.

Sincerely,

Ernest Sakeva
Contracts/Grants Supervisor
Office of Contracts/Procurement

ES/ja

xc: Leigh Jenkins, CPO, w/o enclosures
Kurt Dongoske, CPO, w/o enclosures
Office of Contracts/Procurement
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APPENDIX A

BIBLIOGRAPHY OF ANNOTATED REFERENCES FOR HOPI RESEARCH

T.J.F., September 22, 1994

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1951 *The Psychosocial Analysis of a Hopi Life-History.* University of California Press, Berkeley.

This monograph comprises a detailed "psychosocial" analysis of the life history of Don Talayesva as documented in his autobiography, *Sun Chief.* Aberle dissects the autobiography and provides commentary on what he thinks it means in terms of Talayesva's personality, psychological development, and social relationships.

Aberle makes several observations pertinent to Talayesva's 1911 pilgrimage to the Grand Canyon (pp. 79-80). Among these is the fact that the men on Talayesva's pilgrimage were impressed by his recognizing the scenery in the Grand Canyon as identical with a "death journey" he had experienced while a youth. Aberle points out that Talayesva "showed great interest in exploring the sacred spots they visited and had continually to be restrained from such daring acts."

Talayesva added his initials to the sun symbol he inscribed at *Tutuvehni*, and Aberle (p. 79) notes that this deviation from strict traditional behavior was a source of anxiety for him.

Aberle (p. 80) observes that in 1911 "... very few people were willing to undertake such trips ..." and that only three people went on the pilgrimage to the Grand Canyon. Aberle notes, "Don himself found the trips so difficult that he did not think he would ever repeat them. They form part of his general effort at being a good, conservative Hopi in order to gain success."

Aberle (p. 97) thinks "Contacts with anthropologists provided three things which Don had not found to a sufficient degree within the framework of Hopi culture — easy income, prestige, and relationships of mutual trust." As Aberle (p. 97) points out, "Perhaps because Don knew English, people visiting Oraibi asked for him. Sometimes they took his picture and paid him. Anthropologists asked for stories and paid him well, but he expurgated his accounts of folklore and mythology, since he knew that whites considered sex to be sinful."

Talayesva's work with Leo Simmons, the editor of *Sun Chief*, began in 1938, when Talayesva was forty-eight (p. 99).

Adams, Eleanor B.

1963 Fray Silvestre and the Obstinate Hopi. *New Mexico Historical Review* 38(2):97-138.

This focus of this article is a description of how Fray Silvestre Vélez de Escalante failed to convert the Hopis to Christianity in 1775. Adams includes a translation of Escalante's diary from his journey from Zuni Pueblo to the Hopi pueblos in June and July of 1775. Escalante was guided to Hopi by Zuni Indians. At the Pueblo of Oraibi, Escalante wanted to talk with some Cojninas Indians that were visiting the village so that he could learn about their land and arrange a visit there but the Cojninas Indians had already left Oraibi. At Oraibi, Escalante did speak with two Hopis who had gone to Cojnina many times and who "knew the land" (pp. 127-128). At Walpi Pueblo, Escalante was able to talk with a Cojninas Indian who was visiting that village, and who drew him a map depicting the landscape and between the Hopi Mesas and the Grand Canyon (pp. 130-131).

Escalante's diary thus documents that it was common in the eighteenth century for Hopis and Havasupais to visit one another.

Adams, E. Charles

1978 *Synthesis of Hopi Prehistory and History,* Final Report, A-77-127. Flagstaff: Museum of Northern Arizona.

In this synthesis of Hopi history, Adams includes some brief summaries of the accounts of the Spanish explorers who visited the Hopi Mesas between 1540 and 1821. Adams analyzes the information provided in these chronicles comparatively; he uses their descriptions as a point of reference to discern which elements of Hopi culture have persisted over time. Adams explains that the records offer "some insights into how the people lived and how the villages were organized." Comparing this earlier portrait to the present, Adams concludes that, "The willingness to trade with outsiders, the breadth of material culture and the governing body are all strikingly similar to modern Hopi (p. 22)."

Some disagreement exists about where Pedro de Tovar's party first encountered the Hopis--at Awatovi or Kawaika-a. Adams contends that it was "probably at Awatovi (p. 21)," that the party arrived and stayed among the Hopi for a few days.

Adams, E. Charles

1986 Hopi Use, Occupancy, and Possession of the Indian Reservation Defined by the Act of June 14, 1934: An Archaeological Perspective. Ms. on file, Laboratory of Anthropology, Museum of New Mexico.

This is a draft of Adam's report prepared for the "1934 Case." It contains a wealth of information pertaining to Hopi use and occupancy of northeastern Arizona, including some information specific to the interests of the Hopi GCES project. The archaeological information presented in this draft report was edited to reduce to its length and focus more tightly on the 1934 study area and period of interest. The draft report on file at the Museum of New Mexico is thus different from Adams report that was actually entered into evidence in the 1934 litigation.

In summary, Adams (p. 1) states,

> The Hopi people and their ancestors have occupied, used, and possessed most of northeastern Arizona for several hundred years. This area contains thousands of archaeological sites recognized by archaeologists and historians as ancestral to Hopi. Hopi use, occupation, and possession of this area in 1934 is inseparably connected to their use, occupation, and possession in the preceding prehistoric and historic periods. As a people dependent prehistorically on agriculture, collecting of plants, and hunting of game, and (since the 1600s) the raising and herding of domestic animals, especially sheep, goats, cattle, horses, and burros, their very existence hinged on their knowledge of a vast area and their ability to utilize the various resources of that area without interference from others. This sustaining area the Hopis call "Tusqua."

Adams quotes the 1951 statement of Hopi religious leaders pertaining to the cultural importance of Tusqua (James 1974:102-103), and presents a map of Tusqua (Figure 1, p. 2) taken from Euler's (1986) report for the 1934 Case, "Aspects of Hopi Use and Occupancy." This map shows the traditional boundaries of Tusqua, including a delineation on the northwestern edge that runs along the south rim of the escarpment of the Colorado River and the Grand Canyon from Page, Arizona, to Pota ve Taka.

Adams discusses four periods using three cultural designations (pp. 4-50). The periods preceding AD 700 from AD 700 to 1300 are termed "Hisatsinom." The period from AD 1300 to 1630 is termed "Ancestral Hopi." The period from 1630 to 1940 is termed "Historic Hopi."

With respect to clan migrations, Adams states (pp. 4-5), "The date 1300 marks the time when thousands of immigrants from northeastern Arizona moved to the Hopi mesas. This time corresponds with what Hopi oral tradition refers to as the "gathering of the clans" and is related in most of the migration stories of the Hopi clans."

Adams (p. 5) offers his opinion that, "Oral histories intertwine truth with mythology, but in many cases ancestral Hopi occupation of specific sites has been supported by archaeological evidence. These archaeological sites all postdate A.D. 1100. However, archaeologists have been able to show continuity between the culture occupying sites postdating 1100 with those predating 1100."

Adams points out that by the 1000s, almost every large village contained a stone kiva containing a number of ritual features, including a "sipapu (symbolic entrance to the underworld)."

By AD 1250, people living in the Hopi Buttes area moved north to the Hopi mesas and south to Homolovi sites (pp. 11-13). People on Black Mesa moved south to the Hopi Mesas or north to open sites in the Klethla and Long House Valleys and cliff dwellings in Tsegi Canyon. There was also a population concentration in the area around Tokonavi. By 1300, the sites around Tokonavi and Tsegi Canyon were no longer inhabited and "Indications are that these people moved south to the Hopi Mesas" (p. 13). Population in the Hopi Mesas area increases as these other areas are no longer inhabited, and there are 48 sites on the Hopi Mesas dating to the late 1200s, ranging in size from about 20 rooms to over 100 rooms.

The southeastern portion of the 1934 Reservation boundary follows the general culture history of the Cibola area, including influences and possible influences from Chaco Canyon.

After AD 1250, the Hopi Mesas were one of the few areas containing habitation sites in northeastern Arizona. Other inhabited areas within the 1934 Reservation boundary include Navajo Mountain, Tsegi Canyon, Canyon DeChelly, Moenkopi, and the upper drainages tributary to the Little Colorado River (i.e., Cottonwood-Pueblo Colorado drainages, Leroux-Wide Ruin area, and the Puerco River). The formerly inhabited areas were still used for limited activities, including farming, hunting, gathering, and ceremonial use (pp. 17-18).

By AD 1300, year-round habitation of most of northeastern Arizona was discontinued due, Adams (p. 18) suggests, to an "erosion cycle." Adams (p. 18) notes, however, that "wherever archaeological fieldwork has been done there is evidence of continued ancestral Hopi use of the area." In the Hopi Mesas area, the population consolidated into 15 sites, all of which grew much larger than those sites occupied in the preceding period.

One indication of Hopi land use in the period after AD 1300 is rock art, including petroglyphs and pictographs. Adams (p. 20) states, "These bear distinctive designs, such as masked beings, after the 1300s when the katsina cult was introduced to Hopi ... These rock art designs ... are easily identified."

With respect to Hopi land use after AD 1300, Adam (p. 21) states,

> Modern Hopi use of their environment is not restricted to the area around their village. Farming villages, plant gathering and animal hunting areas, eagle shrine areas, shrines, and rock art denoting land ownership, springs, salt collecting, and grazing areas all occur at distances ranging up to 75 miles (120 km) from the main village ... With the exception of the grazing areas, these modern Hopi uses of land apply to their ancestor's use of the land. Indications of this use are the yellow decorated and plain Hopi pottery and rock art containing depictions of masked beings and other characteristic depictions postdating 1300 ...

Seven Hopi villages are occupied in the period from AD 1300-1400 (p. 21-22). The Hopi people have continued to visit village sites that had been occupied in earlier periods. Kywestema (i.e., Betatakin or the Tsegi Canyon area) is visited regularly by twentieth century Hopis of the Horn Clan and is also visited annually as the location of one of the Tusqua shrines. Tokonavi (Navajo Mountain) is a shrine associated with the Snake and Horn Clans. Chaco Canyon and Mesa Verde are also recognized as ancestral homes. Canyon DeChelly is associated with the Flute Clan. To the south, Homolovi and Sakwavaiupki (Chevlon) sites along the Little Colorado River, occupied ca. AD 1250 to 1400 are associated with the Water, Lizard, Sand, Rabbit, Tobacco, Squash, Sun, Eagle, and other clans. Hopi ceramics and rock art at these and other sites provides evidence of Hopi use and visitation in the period following AD 1350.

As Adams (pp. 21-22) notes, "One noteworthy aspect of the distribution of these Hopi remains is their association with sites or areas that are recorded within oral histories of clan migrations as ancestral homes."

Many other habitation sites in the areas surrounding the Hopi Mesas have ancestral Hopi pottery post-dating AD 1350 (pp. 20-24). In addition, Adams (p. 24) observes, "Numerous small sherd scatters of ancestral Hopi pottery are known throughout the northeastern drainages of the Little Colorado River. These may lie along trails between the Winslow (Homolovi) sites, Hopi sites, and Zuni sites. Others are associated with arable land and are used for farming."

There are concentrations of Hopi ancestral sites from the period AD 1300-1800 in the Moenkopi area (p. 24). Moenkopi has thus been used for Hopi agricultural activities for more than 700 years. Old Moenkopi village, just east of the present Moenkopi village, was founded ca. AD 1400 and occupied past AD 1800.

Adams (pp. 24-25) notes that several archaeological sites in the Grand Canyon are associated with ancestral Hopi pottery. He also states (p. 25), "Rock art sites show Hopi use from the fourteenth century to the present along the Salt Trail originating on the Hopi Mesas and extending to the Little Colorado River where it intersects the Colorado River."

After reviewing the evidence Adams (p. 25) concludes, "Thus, wherever archaeological survey and excavations have been conducted in northeastern Arizona within and extending north, east, south, and west of the 1934 Reservation boundaries,

pottery sherds or rock art of Hopi ancestral manufacture have been found." He thinks many of the small Hopi sites that have been documented represent short-term or seasonal occupation for farming activities.

Adams suggests rock art had several functions (pp. 25-26), stating,

> Rock art sites could have had several uses: religious, as trail markers, to mark nearby resources, such as water, signatures of clan passage or ownership, and perhaps just doodling. Most indicate either permanent use due to occupation of a nearby site, seasonal use, or long-term repeated use, as with a trail. Rock art could mark locations of shrines for expeditions, land boundaries (tusqua), or clan-owned land or eagle collecting sites.

Adams (p. 26) found that there are more than 100 documented Hopi ancestral sites from the period AD 1300-1630 on the 1934 Reservation. Since only 5 to 10 percent of the area has been surveyed, Adams calculates that an estimated 1500 Hopi sites from that era occur in the 1934 Reservation area. If each site were used for one generation (i.e. 20 years), about 100 sites are estimated to have been in use in any one year during that period. Adams (p. 26) concludes, "Archaeological data indicate the Hopi used the entire 1934 Reservation area from AD 1300-1630, primarily to sustain the mesa villages. These uses were farming, gathering, and hunting, while combining economic, religious, and social needs."

Adams provides an overview of Hopi history from the period 1630 to 1940 using documentary sources and archaeological data (pp. 28-50). The beginning of the period is marked by the establishment of Catholic missions at several Hopi sites. One archaeological site from the period 1630 to 1700 is documented on Cummings Mesa, and five non-Navajo (and therefore presumably Hopi) sites post-dating 1600 have been found in Canyon DeChelly (p. 31). The occupation of Canyon DeChelly may have coincided with a period of drought from 1727 to 1737.

Adams (p. 31) thinks the sparse archaeological record of Hopi occupation in the early historic period does not mean the Hopis were not using the area surrounding the Hopi Mesas. He suggests the brevity of the period and the type of land use activities would not generate many archaeological materials. In addition, early Hopi historic pottery is not well-known by many archaeologists and may have been overlooked by some researchers.

Shortly after 1690, the villages of Walpi, Shungopavi, and Mishongnovi were relocated from the bases of their respective mesas to the more defensible mesa tops (p. 32). Shipaulovi was founded about this time. Adams suggests this was a response to the Pueblo Revolt of 1680 and a fear of Spanish reprisals.

Payupki and Hano were founded ca. 1700 by Puebloan refugees from the Rio Grande (pp. 32-33). Sichomovi was founded ca. 1750, bringing the total number of Hopi villages to seven.

Adams thinks that much of the movement of population to and from Hopi villages in the historic period was due to droughts. He notes that in 1780, the Spanish Governor de Anza reported that many Hopis had left their villages to seek refuge in other locations, including the Havasupai in the Grand Canyon and possibly Canyon DeChelly (p. 35). There are sixteen Hopi sites in Canyon DeChelly dating to 1700-1800, many with reused architectural elements from earlier Hisatsinom sites (p. 36).

Adams notes that there is documentary history that provides evidence of Hopis grazing livestock in the 1934 area in the 1700s but no archaeological evidence of this land use has been found due to the ephemeral nature of the material culture associated with this activity (p. 38).

Adams states that Navajo and Ute raids in the period from 1780 to 1864 constrained the geographic extent of Hopi grazing. Animals were kept close to the Hopi villages and penned at night. Adams (p. 42) notes that, "After 1864, the Hopis returned to their traditional pattern of land use reported by Escalante in 1776 when he observed large herds of cattle near Moenkopi." The number of Hopi livestock was greatly increased during this period. Drought and overgrazed ranges near the Hopi villages also contributed to an expansion of the grazing area after 1864 as Hopis sought water and forage farther from the intensively used lands near their villages (p. 43).

Modern Moenkopi was founded in the 1870s, in an area where Hopis had long farmed the Moenkopi Wash, Pasture Canyon, and other nearby areas.

Adams describes the architectural evidence of Hopi grazing patterns and how these differ from Navajo patterns (pp. 46-48). Hopis have distinctive corrals built using stone elements and incorporating natural outcrops. Few houses were built in grazing areas, although Hopis who hired Navajos as sheep herds occasionally built houses or hogans for them. Distinctive styles of Hopi ceramics and rock art can be used to identify Hopi grazing sites.

With respect to shrines, Adams (p. 47) states,

> ... a unique aspect of ... most Hopi use areas, are the building of shrines. These can be piles of rock with prayer feathers nearby, and occasionally pottery and stone. Usually, however, they are built of stone slabs. These are placed upright in the ground forming three sides of a square or rectangle, leaving the south or east side open. A fourth slab covers the others. Within the stone box, or shrine, prayer feather offerings are left. Prayer sticks with feathers are made in the kivas and bear prayers to the Hopi deities for favorable conditions for them to grow and thrive. Some are for fertility and protection and are placed in corrals near the livestock. Other shrines are marked by rock art and the offerings are buried in the earth. These would be impossible to located without a knowledgeable informant to point them out.

Adams states that in the 19th century, virtually the entire 1934 Reservation was used by the Hopis for hunting and gathering (p. 47).

Adams cites Whiting's (1939) work on Hopi ethnobotany to describe the extent of Hopi plant gathering. Adams (p. 47-48) thinks that locating the archaeological remains of plant gathering is "nearly impossible."

Adams points out that five sites with Polacca Polychrome dating to the 1800s have been identified in the 1934 area. Given the small area that has been archaeologically surveyed, Adams estimates there is probably a total of 100 sites from this period, or twenty sites per year. He thinks most of these are probably related to farming activities. There is an increase in the number of sites after 1875, which Adams suggests indicates Hopi reexpansion into areas following Navajo subjugation in 1868.

The Navajos began to settle in the Black Mesa in the period from 1850 to 1900, leading to the development of "Navajo and Hopi co-use of co-occupancy" of areas that had long been used exclusively by the Hopis (p. 50). After 1900, the Navajos continued to expand into areas used by Hopis. The Navajo Reservation was enlarged in 1900, 1901, 1907, 1917, and 1934 as a result of Navajo expansion into the Hopi land use area.

In ca. 1939, intensive areas of Hopi land use outside the 1882 Hopi Indian Reservation included areas to the southeast, southwest, and west (p. 53). Principle activities documented for these areas included farming and grazing. These areas include Red Lake, Tovar Mesa, White Cone, Comar Spring, Dinnebito, Cameron, Howell Mesa, White Mesa, Tuba City, and Pasture Canyon. Land use activities included farming, grazing, wood gathering, hunting, fishing, and plant collection.

Adams (pp. 55-58) draws upon analysis of aerial photographs, informants, material culture, and rock art to conclude that the area around Moenkopi was intensively used by Hopis in the twentieth century.

Between 1900 and 1940 there was a gradual trend towards livestock becoming a larger source of income than agricultural production in the Hopi economy (p. 57).

Wood gathering occurred in the Kabito Plateau and Hopi Buttes (p. 58).

Adams (p. 60) says, "Hopi rock art, in contrast to Navajo, includes clan symbols, brands, and names. Often dates accompany these."

The Hopi pattern of land use includes farming centered near a village, sheepherding in an area 10-15 miles around the village, and cattle herding up to 50 miles from the village (p. 61). Activities associated with farming and livestock leave a substantial archaeological record. Adams (p. 61) notes, however, that "Other activities clearly reflecting use, such as gathering and hunting, rarely leave material remains ... Activities such as ritual, including eagle gathering, salt trail trips, trips to gather 'spruce' or Douglas fir, frequently leave archaeological evidence."

Using aerial photographs, multiple informants, dates inscribed in rock art panels, and other sources of data, Adams (pp. 61-74) documents 58 Hopi archaeological sites occupied or used in the 1930s in the 1934 Case study area (Table 5). These sites include 13 farming sites, 28 ranching sites with corrals, 13 rock art sites (with names, dates, brands, kachina figures, and other motifs), and 11 other sites (e.g., cairns, rock quarries, duma quarry, shrine, and water control features).

A collecting site (#147) for duma (a soil high in kaolin clay content) is located 12 km southeast of Moenkopi (p. 73). Duma is collected for white wash, ritual body painting, and coloring katsina dolls.

At least one of the two documented cairns (and perhaps both) is associated with the stretch of the Salt Trail that runs from Oraibi to Moenkopi (p. 74). Adams says, "In using this trail, the traveler would stop at the cairn or trail marker, pick up a stone from the vicinity and a gramma grass or shrub (ideally gramma grass) and use them to scrape or cleanse themselves. Both the stone and plant were then placed on the cairn." The cairn definitely associated with the Salt Trail is located near the duma collecting site.

Adams discusses site use categories (pp. 74-88), noting that farming and ranching are two basic activities that require seasonal or permanent use of an area outside the village proper.

Adams (pp. 86-88) describes the archaeological evidence for ritual use of the landscape in the Moenkopi area. This evidence includes "the Hopi Salt Trail, which was used by Third Mesa Hopi, and shrines associated with Moenkopi villages." Adams says,

> Two shrines on the Salt Trail were recorded and were in use in 1934. The first, site 107, lies 9.3 miles (15 km) east of the village. It consists of a pile of rocks where the Hopi users of this trail cleansed themselves. This portion of the trail was used by travelers from Oraibi and other Hopi villages to Moenkopi, as well as those on the expeditions to gather salt. Associated with this rock pile is a white clay (duma) outcrop (site 147) that could have been collected in conjunction with use of the rock pile or on separate occasions. The second site, Tutuveni (Writing or Inscription Rock), lies 9.5 miles (15.3 km) west-northwest of the village. At this place members of the salt expedition would stop and carve or peck their clan emblem in the rock at this shrine. The use of Tutuveni probably dates back hundreds of years and indicates the antiquity of the journey to the location of the salt and of the Sipapu which most Hopi believe is the original place of their emergence from an underworld into the present world. Both the Sipapu and salt source are located on or near where the Little Colorado River enters the Colorado River at the bottom of the canyons. The Sipapu is located in the 1934 Reservation area; the Salt deposit, just outside.

This entire trail leading from Oraibi through the Moenkopi area, to Moenave, to Tutuveni, then to the Sipapu and the salt mine has been in use for hundreds of years, and was still in use in 1912.

A second shrine called Salako (Shalako) by the Hopi at Moenkopi, lies near the head of Pasture Canyon, 4.8 miles (7.7 km) north of the village. From at least the late 1800s through the 1930s, up to the present, the shrine has been used by the Hopi by placing their prayer feathers within the small cave comprising the shrine. Such prayer sticks were still visible in the cave in 1983 indicating recent use. A spring flows from the cave and the shrine insures the continued flow of water from the spring for the benefit of the Hopi fields downstream within Pasture Canyon. Small shrines of individuals or groups within Moenkopi village lie near the village in fields or corrals. These are placed to increase fertility of the plants and animals. An example of a small private shrine in a corral area was located at site 82 in the north cliff of Moenkopi Wash, 2.2 miles (3.5 km) east of Moenkopi village. Allotments to Hopi in this area and the presence of fields, houses, corrals, and other structures or forms of land modification meant the recording of shrines near the village was done only as they were encountered. Actually each spring within a 10-mile (16 km) radius of the village has been given a Hopi name and has the potential to be a shrine location, because water is so vital to the survival of the people and their crops.

Adams (pp. 88-92) concludes his report by stating, "The archaeological evidence summarized in the preceding sections paints a picture of extensive and sometimes intensive use of most of the 1934 Reservation by the Hopi and their ancestors, the Hisatsinom, since before A. D. 700."

Adams, Charles, Miriam T. Stark, and Deborah S. Dosh
1993 Ceramic Distribution and Exchange: Jeddito Yellow Ware and Implications for Social Complexity. *Journal of Field Archaeology* 20(1):3-21.

This article uses archaeological data to refute the "alliance model" of Hopi prehistory. The alliance model theorizes that elaborate economic "alliances" occurred concurrently with socio-political stratification, and that large sites were occupied by elites who controlled and managed people living in smaller sites. Jeddito Yellow Ware is interpreted as being associated with elites so one implication of the alliance model is that this ceramic should occur in significantly higher frequencies on large sites than on small sites. The alliance model is rejected after analysis of 430 sites with yellow ware shows that this ceramic occurs on both large and small sites. The authors suggest that household based complementary exchange accounts for the distribution of Jeddito Yellow Ware better than an elite-based redistributional system.

One of the regions with yellow ware sites investigated by the authors is the "Northern Frontier." This region lies to the north of Hopi and encompasses the area extending from upper reaches of the Jeddito, Polacca, Dinnebito, and Moenkopi Washes to the Colorado River. Of this area, Adams et al. (p. 11) state,

> Fourteenth-century rock art sites in the region bear a strong resemblance to contemporary art styles on the Hopi Mesa sites, and support the idea that the prehistoric Hopi Mesa population incorporated sections of the Northern Frontier into its land use patterns ... Twentieth-century ethnographers describe various Hopi uses of the area including hunting, gathering, trapping eagles for use in ceremonies, and visiting shrines marking ancestral homes and boundaries of Hopi land ... Titiev (1937) also records salt gathering and eagle hunting expeditions in areas north of the Hopi Mesas. Post A.D.1400 yellow ware sites located more than 10 km away from the large sites are much less common and are associated with rock art or sites in circumscribed ecological niches that may have been more suitable for cotton agriculture (as is the case at Moenkopi). Alternately, these sites may be related to the procurement of local, rare resources, such as salt in the Little Colorado River gorge or eagles nested in the cliffs that are scattered across the plateau.

Ahlstrom, Richard V. N., David E. Purcell, M. Zyniecki, Dennis Gilpin, and Virginia L. Newton

1993 *An Archaeological Overview of the Grand Canyon National Park.* SWCA Archaeological Report No. 93-92, Flagstaff, Arizona.

This report summarizes the findings of dozens of archaeological projects that have been conducted within the Grand Canyon National Park (p. ix). Its purpose is to provide information for management of cultural resources. Approximately five percent of the Grand Canyon National Park has been archaeologically surveyed, yielding documentation of approximately 2,700 cultural resource sites.

Ahlstrom *et al.* discuss the need and advisability of using an alternate term for "Anasazi" (pp. 61-62) With respect to archaeological systematics, the authors suggest the prior use of the term "Hisatsinom" for a late Archaic phase in the northern Black Mesa area should preempt its use by archaeologists to label more extensive ancestral Hopi archaeological remains. For this and other reasons, the authors suggest the term "Prehistoric Pueblo" be substituted for "Anasazi."

In a brief overview of Hopi ethnography, Ahlstrom *et al.* describe the cultural importance of the Grand Canyon to the Hopi people, noting it is the place of emergence, where Hopis return after death, and the destination of a well-documented religious pilgrimage (pp. 82-83). The authors state the last documented salt pilgrimage to the Grand Canyon occurred in 1912. Citing a personal communication from Leigh Jenkins, reference is made to an attempted (but failed) salt pilgrimage from Hotevilla in 1936. Jenkins notes that ritual pilgrimages to the Grand Canyon for purposes other than the salt pilgrimage associated with the Wuwuchim ceremony have occurred as recently as the 1980s. Some sources suggest the Kohnina (Cohonino) Kachina, that represents the Havasupai people, resides in the Grand Canyon during the winter.

On p. 92, Ahlstrom *et al.* note the Grand Canyon was "intensively used" by the Hopis (and other Native American groups) in historic times. This historic use is characterized as being "specialized" (p. 95), mostly relating to ritual use of the Salt Mine, *Sipapuni*, and other sacred sites. Other Hopi archaeological sites are described as including masonry rooms, a roasting pit, salt mines, and artifacts. It is noted that some of the distinctive Hopi yellowware ceramics found in the Grand Canyon were traded to Pai/Paiute groups.

Aitchison, Stewart

1968 A New Route. *Canyon Echo,* 11/1/68, p. 6. Ms. in "Hopi Salt Trail Paraphernalia" file at Museum of Northern Arizona Library.

This is a one page description of a route Aitchison took to hike out of the Little Colorado River. This route goes up a side canyon on the north side of the Little Colorado River about two miles east of the confluence with the Colorado River. Aitchison notes, "Without a doubt this is not an easy hike and may even border on the hazardous at times." Previous to the exploration of this route, Aitchison states the only trails into the lower Little Colorado River Gorge were the Blue Springs Trail, the Horse Trail, and the Salt Trail.

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Aitchison, Stewart

1985 *A Naturalist's Guide to Hiking the Grand Canyon.* Prentice-Hall, Englewood Cliffs, New Jersey.

In describing the Tanner Trail, Aitchison states (p. 95),

> The Anasazi and later the Hopi descended this route with some variations to reach homes within the Canyon and a sacred salt deposit near the mouth of the Little Colorado. It was near Lipan Point that the first Europeans saw the Grand Canyon. The Hopis led Garcia Lopez de Cardenas here in 1540 but did not disclose to the Spaniards that they knew of a way into the Canyon.

He notes that Seth Tanner was a Mormon settler from Tuba City who prospected in the eastern Grand Canyon.

The trail descends 4,700 vertical feet from the rim to the river. It is nine miles from the rim to Tanner Rapids, and then four miles from Tanner Rapids to Palisades Creek and five miles from Palisades Creek to the Little Colorado River (p. 93).

Aitchison states the trail from Tanner Canyon upriver to the Little Colorado River "is an old Indian route" that was upgraded by the prospector Ben Beamer who "took up residence in an Anasazi cliff dwelling a short distance up the Little Colorado River." Aitchison says that Beamer constructed a larger door and window n the ruin.

Ainsworth, Allan D.

1988 Hopi Use and Occupancy of the Indian Reservation Defined by the Act of June 14th, 1934: A Sociocultural Perspective on the Use of Natural Resources by the Hopi Indians. Ms. on file at the Hopi Cultural Preservation Office, Kykotsmovi, Arizona.

This report was prepared as expert testimony for the "1934 Case" litigation between the Hopi and Navajo Tribes. While the focus of the report is thus on lands located within the disputed 1934 reservation, Ainsworth does make several observations about Hopi use of the Grand Canyon. Land use outside of the area subject to litigation is described but not mapped so Ainsworth's report only presents general information about the location of Hopi activities in and near the Grand Canyon.

A number of wild plants are described as being gathered from the Grand Canyon area (p. 17). Greens such as wi'wa (coxcomb) and ko'mo (pigweed) are collected along the Colorado River (pp. 18-19). Pinyon nuts were collected in the Grand Canyon area (pp. 22-23). Cottonwood for prayer sticks, katsina dolls, other ceremonial paraphernalia and construction use is collected at Lee's Ferry and other locations along the Colorado River near the Grand Canyon (pp. 30, 44). Medicinal plants are collected in the Grand Canyon (p. 32). Plants for religious use are collected from the Grand Canyon (p. 33). Oak for hunting sticks is collected at the Grand Canyon (p. 36). Wood for bows and arrows is collected at Marble Canyon (p. 37). In the past, Hopis collected fuelwood in the Watch Tower area of the Grand Canyon area (p. 42).

Ainsworth also reports the Hopis hunted a number of animals in the vicinity of the Colorado River and Grand Canyon. Rabbits were hunted at Lee's Ferry and in the Grand Canyon area (p. 72). Deer were hunted near the Grand Canyon (Appendix 3, Table 1). Hopis fish at Lee's Ferry (p. 73). Eagles are gathered in the Grand Canyon (p. 76).

The importance of the Hopi salt pilgrimage to the Grand Canyon and several of the major shrines along the Hopi Salt Trail are discussed (pp. 82-83).

Minerals collected in or near the Grand Canyon include clay, copper carbonate, and blue coloring (pp. 85-86).

The names of the Hopi consultants providing information about Hopi land use in the Grand Canyon (and other areas) are provided in Appendix 3, Table 1. For the Grand Canyon area, two Hopis document collecting greens, nine Hopis document collecting pinyon nuts, one Hopi documents collecting pine pitch, one Hopi documents collecting Cottonwood roots, three Hopis document collecting medicinal plants, one Hopi documents collecting unspecified plants, one Hopi documents collecting Oak, fourteen Hopis document collecting cedar and juniper, one Hopi documents hunting rabbits, sixteen Hopis document hunting deer, four Hopis document religious use, twenty-eight Hopis document collecting salt, pigments and other minerals.

Alter, J. Cecil

1928 Some Useful Early Utah Indian References. *The Utah Historical Quarterly* 1:52-56.

Alter gathered numerous references to Utah Indians from the early exploration accounts and published them serially over six editions of this journal. This one entry concentrates on the travels of Francisco Garces through the Utah and Arizona territories in the late eighteenth century.

Garces' remarks about the Hopis reveal their reluctance to engage in contact with whites. In Garces' case, the Hopis were even more unyielding than they had been in previous interactions with Spanish explorers and missionaries, refusing compliance altogether. Perhaps passive resistance had not been a strong enough defense against the onslaught of the foreigners' presence. Garces reports that when passing by the Hopi Mesas "(the people of) this pueblo of Oraibe did not so much as wish to look at me" (p. 54).

In trying to coordinate his return travels, Garces mentions that he would not pass through the Hopi's villages without Yabipais (modern spelling, Yavapai) guides because it would be dangerous. He writes, "I could not well return by way of Moqui, of whose Indians I should have cause to be afraid if I were to return without those companions" (p. 54). The Hopis obviously defended their autonomy quite aggressively in this period of increased infiltration of European culture into the Southwest.

Annerino, John

1986 *Hiking the Grand Canyon.* Sierra Club Books, San Francisco.

Annerino (p. 139) notes that during the gold rush of the late 1880s there were supposed to have been 84 trails in the Grand Canyon. Today only a few of these are maintained as trails; others exist only as "routes" from the rim to the river.

Annerino (pp. 139-141) states that Cádenas approached the Grand Canyon with the help of the Hopis "... somewhere west of Tanner Canyon." He provides the erroneous date of 1535 for this visit.

Annerino (p. 141) describes the Tanner Trail as "the old Hopi route that once descended the east arm of Tanner Canyon." He notes that "Mormon pioneer and prospector Seth B. Tanner rebuilt the upper third of this trail in ca. 1884," and that it was subsequently used by horsethiefs and moonshiners.

In describing day hikes up the Little Colorado River Gorge from the Colorado River, Annerino notes there is a 4.5 mile hike to the "Hopi Indians' sacred Sipapu." He writes (p. 228), "

> Please note: In deference to Hopi religious beliefs, the author agrees the area should not be visited - or photographed - by non-Hopi. If you must pass by the Sipapu en route to Salt Trail Canyon 6½ miles up from the Colorado River confluence, or coming down the Little Colorado River Gorge from Cameron, please exercise discretion in this area, as the Hopi know and revere it as the opening through which all mankind originally emerged.

Arntzen, Ruth M.

1936 *The Influence of Prehistoric Religious Ceremonies Upon the Living Indian Tribes of the Southwest.* Master's thesis, Anthropology Department, University of Arizona.

Arntzen's thesis combines the field research of many other ethnographers of Southwestern Indians, and presents them in a synthesized format, organized by time period and tribe. This is one of the most dangerous approaches an anthropologist can take to the study of culture and religion because they are necessarily elaborate and complicated issues. When ethnographic data is synthesized, its subtlety and essence is lost or, even worse, obscured. But Arntzen's aim is to demonstrate a relationship between the distant past and present in Southwestern Indians' religious practices and this requires a leveling of complexity to show comparisons.

In Arntzen's discussion on prehistoric Indian peoples of the Southwest, she states that the existence of kivas in excavated sites provides "evidence of a religious nature" (p. 25) among the early inhabitants of the region. Based on the lecture notes of her professor, Dr. Byron Cummings, Arntzen describe the kivas of these ruins, writing (pp. 25-26):

> Although the kivas vary in size and in shape the typical form was a circular, subterranean chamber. In the center of the room was a firepit . . . . Directly in line with the firepit was a small opening in the floor of the kiva. In some cases a small olla was placed in the hard packed floor. The mouth of the olla made an opening three or four inches in diameter in the floor level, and this hole is called a sipapu.

The opening in the floor of the kiva, which Arntzen calls sipapu, is symbolic for the actual sipapu--a hole in the surface of the earth (presumably, near the mouth of the Little Colorado River) through which all beings emerged from the underworld into this world.

In a discussion on burial practices, Arntzen states that "After the spirit of the dead has remained in the grave with the body for four days it emerges to accompany the sun to the west and from there passes to the underworld" (p. 35). This reference to the deceased traveling west and then into the underworld resembles the accounts of others who have identified the Grand Canyon as the place to which Hopis return after death (Talayesva 1942; Titiev 1939; Colton 1946).

In her discussion of the origins of the Hopi Snake ceremony, Arntzen explains that (p. 42):

> The Snake ceremony is an elaborate prayer for rain rather than a form of snake worship as some would suppose. It is based on a legend in which an early ancestor of the Hopis, named Tiyo, made his way to the underworld region of the Snake People with the aid of the Spider Woman. These

> people received him kindly and instructed him in the secret rites of rain-making and also presented him and his brother with two maidens for their brides. . . . Later human children were born to the Snake Woman. . . . [H]er children inherited the knowledge of the rites for bringing rain and, remaining among the Hopi, they became the ancestors of the Snake People.

Arntzen's claim that the Snake People lived in the underworld differs from many other versions of the story of Tiyo which place the Snake People within the Grand Canyon.

Bailey, Paul

1948 *Jacob Hamblin, Buckskin Apostle*. Westernlore Press, Los Angeles.

Jacob Hamblin was the first Mormon missionary to proselytize the Hopis. A substantial part of this biography summarizes Hamblin's missionary activities with the Hopis and other tribes from 1858 to 1879.

Of particular interest to the Hopi GCES project are the descriptions of the trails Hamblin used to travel from Utah to the Hopi mesas. These descriptions demonstrate there were well-established routes linking the Hopis to the Colorado River and the neighboring tribes that lived to the north of the river. The endpaper in the book binding provides a map of these trails but this depiction is obviously schematic. Nonetheless, from the descriptions and map, the general route of the trails is documented.

In October, 1858, Hamblin used a Paiute Indian named Naraguts as a guide on his first trip to Hopi (pp. 195-200). Naraguts had crossed the Colorado River several times previously, and took Hamblin's party across the river at "Ute Ford," or the "Crossing of the Fathers." From there it was a three day journey to Oraibi. This trail was also used during the second and third trips in October of 1859 (pp. 213-220) and in the fall of 1860 (pp. 225-240).

On the fourth expedition to the Hopi in November, 1862, Hamblin used a trail that crossed the Colorado River to the west of the Grand Canyon (what later became known as Pearce's Ferry), traveling eastward to the north of the San Francisco Peaks and thence to the Hopi Mesas after crossing the Little Colorado River (pp. 250-254). Hamblin used the Ute Crossing on his return to Utah in December 1862.

Hamblin wanted to take several Hopis back to Utah with him, but reported they were reluctant to do so because of a a Hopi tradition "forbidding them to cross the great river." After consultation, the Hopi chiefs sent three Hopi men with Hamblin. In his journal history, Hamblin states (p. 254) , "On arriving at the Ute crossing of the Colorado, we found the water deep and ice running. Fording was difficult and dangerous. This coupled with the traditions of the Moquis against crossing this river, visibly affected our Moqui friends." The Hopis were determined to return home, so Hamblin "encouraged" them to cross by sending their blankets and provisions across the river and persuading them to mount horses and enter the river where it became a situation of "swim or die." Once on the other side, Bailey describes how "the three Hopis sprinkled earth and water with sacred meal from their medicine bags, and prayed aloud their thanks."

The Hopis stayed with Hamblin in Utah until March of 1863, at which time Hamblin returned with them to the Hopi Mesas (pp. 255-262), using the trail that ran through Pearces's Ferry and the territory of the Walapai. They also visited the Havasupai, and used the Topocoba Trail to ascend out of the Grand Canyon. In returning to Utah after visiting Oraibi, Hamblin's party traveled west using part of the road constructed earlier by Beale.

In 1870 the Hopi chief Tuba also said the Hopis once lived on the northern side of the Colorado River, and that their fathers told them that never again would they go west of this river to live (p. 238). Tuba, like the Hopis in 1862, offered prayers before crossing the river (pp. 327-329, 340).

In 1873, John D. Lee constructed a ferry (Lee's Ferry) at a crossing used earlier by Hamblin, and Hamblin used this route to pilot Mormons into Arizona via a route that ran south to Moenkopi (pp. 348-349).

Bailey, Paul

1961 *Jacob Hamblin: Buckskin Apostle.* Westernlore Press, Los Angeles.

Bailey's book reconstructs the life and adventures of the Mormon missionary, Jacob Hamblin, based on the content of Hamblin's journal. Included in this eventful life of missionary work are numerous trips to the Hopi Mesas.

In November, 1858 Hamblin visited Hopi for the first time. He came to lure Hopis away from their Mesas to move to the fertile region of the Virgin River Valley in southern Utah (p. 206). Over the next two decades, Hamblin would continue to visit the Hopis to encourage Hopis to relocate, but also with the goal of establishing a mission at the Mesas. Throughout his extensive contact with Hopis, Hamblin recorded some interesting information regarding Hopi ties to the Grand Canyon.

On Hamblin's first trip to the Mesas, he was led by a Paiute guide. The events of the Mormons' trip to Hopiland, with the assistance of the Paiute guide, demonstrate that intercourse between Hopis on the southeastern side of the Grand Canyon and Ute-speaking people to the northwest, was quite regular. The Mormon entourage came to the Colorado River along the "Ute trail" which led to a viable crossing spot on the river, one of the only two crossings within a few hundred miles. The Paiute guide led Hamblin and his party across the river and on to the Hopi Mesas. As they approached Hopi territory, the Paiute showed clear familiarity with the peoples' culture (pp. 199-200). The Hopis, in turn, demonstrated that they were quite accustomed to contact with peoples from the north, with the Chief of Oraibi, Chief Tuba, speaking in the Ute language with the Paiute guide (p. 201).

The Hopi's connection to the north side of the Colorado River had much deeper roots than this, however. From the events which occurred during the Mormons' stay at Oraibi, it became clear that Hopi's had long-held beliefs relating to contact with the other side of the Colorado River. In fact, there was a ceremonial restriction to crossing the river until prophets from the West appeared. Hamblin learned that at first some Hopis, including Chief Tuba, thought the Mormons might be the prophets alluded to in their prophecy, but, eventually, the Oraibians reached a consensus that these were not the men of whom their ancestors had told them. Hamblin learned that (p. 208):

> The Hopis had no desire to cross the Colorado and go live with the Mormons. Their fathers had given them a tradition that they must not cross the river until the three prophets who in ancient times had taken them into their country, should appear and lead them forth again. It had been decided after much fury of council that the Mormons were not the prophets .

This statement suggests that the Colorado River had a significant place in Hopi beliefs. Numerous times throughout Hamblin's journal he included comments about the meaningfulness of crossing the Colorado River (pp. 220, 253, 254, 275).

In 1862, for instance, Hamblin succeeded in convincing three unnamed Hopis to accompany him to the Mormon settlements for a year-long stay. When the travelers got to the Colorado River, Hamblin recorded in his journal that, "the traditions of the Moquis against crossing this river, visibly affected our Moqui friends" (p. 254). Also, a year later, Chief Tuba accompanied Hamblin across the chasm and similarly showed a deep respect for the canyon and his peoples' traditions. Hamblin recalled the events of Tuba's crossing as such (p. 328):

> "Jacob," he [Tuba] said, "my people once lived on your side of the river. Their fathers told them that never again would they go west of this river to live."
>
> "But, you're going only to visit," Jacob said, kindly. "Not to live."
>
> Tuba looked uncertainly at the high and bright-hued cliffs, at the icy margins of the roaring yellow river, at his fat and kindly little wife. "Yes, I'm going on a visit to my friends," he said. "I've worshipped the Father of us all in the way you believe to be right. Now I wish you'd do as the Hopi think right before we cross." . . .
>
> From his loose blouse Tuba drew the medicine bag. Opening it, he offered of its contents to Jacob. "No, please, your right hand," he said, as Jacob entered ceremony with the wrong hand. While the brethren watched, Jacob took a pinch of the sacred meal with the correct hand. With his face to the east, Tuba then knelt in native prayer," and asked the Great Father of All to preserve us in crossing the river . . . . He said that he and his wife had left many friends at home, and if they never lived to return, their friends would weep much. He prayed for pity upon his friends, the 'Mormons,' that none of them might drown in crossing; and that all the animals we had might be spared . . . and to preserve unto us all our food and clothing, that we need not suffer hunger nor cold on our journey. He then arose to his feet. We scattered the ingredients from the medicine bag into the air, on to the land and into the water of the river.

Tuba's words and actions signify a deep respect for the canyon of the Colorado.

Although Hamblin tended to cross the Colorado River further north of Cataract Canyon on his trips to Hopiland, on one occasion he traveled to the Hopi Mesas by way of the Walapai and Havasupai villages within the canyon (p. 261). Possibly, Hopis assisted Hamblin as guides in the completion of this new route. Coincidentally, Hamblin embarked on his journey through the Grand Canyon on the very same trip in which the three Oraibians who had come with him to southern Utah, accompanied him back to the Hopi Mesas. These Hopis may have guided Hamblin on his expedition across Cataract Canyon, to the Colorado Plateau and on to Hopiland.

Balsom, Janet R.

1993 Native Americans of the Grand Canyon. In *Hiking the Grand Canyon* by John Annerino, pp. 6-13. Sierra Club Books, San Francisco.

This brief account of Native American occupation of the Grand Canyon was written for a general audience. Balsom notes the cultural history of the Grand Canyon began 3,000 to 4,000 years ago during the Archaic period and Native American have continued to occupy the canyon in one form or another to the present. She discusses the Anasazi occupation of the western portion of the canyon from about AD 700 to 1150. Of the 2,500 recorded sites in the Grand Canyon about 1,500 (60%) date to the PII period. The Cohonina were using the western South Rim of the Grand Canyon at the same time the Anasasi were building their farming settlements.

Balsom (pp. 10-11) thinks the Anasazi "abandoned" their occupation within the Grand Canyon around AD 1150 due to climatic change that made farming difficult. She thinks this climatic change also forced the hunting and gathering Cohonina to leave. Reoccupation of the Grand Canyon began about AD 1300 with Southern Paiute and Cerbat (ancestors of the Hualapai and Havasupai).

Balsom (p. 11) observes that the Hopi can trace their ancestry to the prehistoric pueblo people who inhabited the Grand Canyon. She notes (p. 12),

> The Grand Canyon is very important to the Hopi. IT is a symbolic place, the place where human beings and animals emerged from the underworld and the place where they dead returned. The Sipapu, or place of emergence, is located within the Grand Canyon, near the confluence of the Colorado and Little Colorado rivers. According to Hopi belief, the Hopi lived in a number of worlds below this one. They emerged through the Sipapu into this one.
>
> The Hopi also used the Grand Canyon for salt. Salt deposits are found along the Colorado River near the confluence with the Little Colorado. These salt mines are sacred to the Hopi and have been placed off-limits by the National Park Service. The Hopi have been known to make the 100-mile pilgrimage along the Salt Trail into historic times. The last documented trip was made in the 1960s.

Balsom (p. 12) observes, "The Navajo are newcomers to the Grand Canyon region."

Balsom (p. 12) states that Hopi and Havasupai trade began in the 1300s.

Bancroft, Hubert Howe

1889 *The Works of Hubert Howe Bancroft, Vol. XVII, The History of Arizona and New Mexico, 1530-1888.* The History Company, San Francisco.

Bancroft reports that Padre Jacobo Sedelmair of Tubutama set out in 1744 to visit the Moquis (p. 365-366). Seldelmair traveled up the Colorado River as far as the mouth of the Bill Williams River but did not reach the Hopi Mesas. Bancroft reports that "the Moquis were understood to live not more than two or three days journey away, having frequent commercial intercourse with the Colorado tribes."

Barber, Edwin A.

1877 On the Ancient and Modern Pueblo Tribes of the Pacific Slope of the United States. *The American Naturalist* 11:591-599.

As Barber states, "The object of this paper is to give some facts which will help to prove that the ancient people with whom originated the ruins of this section [within Colorado, Utah, New Mexico, and Arizona] were the ancestors of the three house-building tribes"--namely, the Zunis, Pueblos, and Hopis. To accomplish this, Barber compares the remains of these ruins with the modern styles of architecture, pottery, tools, etc. at the Hopi Mesas. He deduces that the inhabitants of the ancient and modern sites were the same (pp. 594-597).

According to Barber, the Hopis believed that they once lived in the San Juan River Valley, stating (pp. 592-593):

> The entire country covered by ancient habitations was occupied long ago by a peaceful, agricultural, and pastoral race, from the time the earth was but a small island. Here they flourished and multiplied for many generations, tilling the soil and raising flocks and herds along the fertile river valleys. After a time another tribe, uncultivated and barbarous, came down from the north to visit them. The people received them kindly and treated them in a hospitable manner, and their visits grew more frequent. Finally they became annoying and showed a warlike spirit. The owners of the land then fled to the cliffs, and subsisted as best they could, until the barbarians from the north came down with their families and settled permanently with their families, driving their victims from the country. Then the persecuted people gathered together once more at the *Cristone* (a needle-shaped spire of rock on the San Juan River). Here they built houses in the caves and cliffs; erected fortresses, watch-towers, and store-houses; and dug reservoirs to supply themselves with water. After a prolonged battle their enemies were repulsed; but the conquerors retired to the deserts of Arizona and settled on the high bluffs of that region, where their posterity, the Moquis, live to this day.

Barber reports that the Ute Indians of Southern Colorado acknowledged that the "Moquich" or Moquis were the people who lived in the prehistoric pueblos (p. 593). Barber states this was a prevalent belief among the several bands of Utes he encountered.

Barber suggests that Hopi migration all moved from north to south. "This supposition," he writes, "agrees with the traditions of the natives and is supported by the general appearance of the remains. Those farthest north are in the greatest state of decay, while as we advance southward they are much better preserved" (p. 593).

Barber points to the remains of art and tools discovered in his excavations to substantiate his claim that the ruins extending throughout the region were occupied by

ancestors of the Pueblo, Zuni, and Hopi tribes. He claims that the findings throughout the region are so uniform that "It . . . matters little what we call the ancients, whether Moquis, Zunis, or Pueblos, although for convenience and on account of their architectural peculiarities, we may term them the ancient *Pueblos,* or town builders" (p. 597).

Although the Colorado River is mentioned as one of the valleys with copious ruins left by these ancient town builders (p. 591), Barber offers no specific information about occupation of this river valley or migration from it.

Barber (p. 599) concludes with the observation, since proven wrong, that "The Moqui are dwindling away year by year ... In a short time they will have entirely disappeared, and their deserted towns will form other groups among the ruins which now dot the desert of the far Southwest."

Barber, Edwin A.

1877 On the Ancient and Modern Pueblo Tribes of the Pacific Slope of the United States. *The American Naturalist* 11:591-599.

This early work in the field of archaeology is a useful source of information about Pueblo ruins in the American Southwest. It is equally useful as a demonstration of how far research in the field has come since this early date.

Barber states that "The object of this paper is to give some facts which will help to prove that the ancient people with whom originated the ruins of this section [within Colorado, Utah, New Mexico, and Arizona] were the ancestors of the three house-building tribes"--namely, the Zunis, Pueblos, and Hopis. He claims this broad purpose but quickly turns his attention solely to material about one region--the northern portion of the area in southern Colorado--and to specific information about the Hopi. He never explains his shift to his reader because, it seems, he feels that it is logical to make inferences about all three groups from material about only one. Such a lack of rigor in his research method characterizes much of the work. It, by the same token, diminishes its worth.

But, Barber traveled to this region at an early date and collected materials and testimony there which are no longer available today. His primary research is useful to us for that reason.

Barber records a Hopi story which illuminates what nineteenth-century Hopis knew about the ruins along the San Juan River and the history behind the relics of these abandoned pueblos. According to Barber, the Hopis believed that (pp. 592-593):

> The entire country covered by ancient habitations was occupied long ago by a peaceful, agricultural, and pastoral race, from the time the earth was but a small island. Here they flourished and multiplied for many generations, tilling the soil and raising flocks and herds along the fertile river valleys. After a time another tribe, uncultivated and barbarous, came down from the north to visit them. The people received them kindly and treated them in a hospitable manner, and their visits grew more frequent. Finally they became annoying and showed a warlike spirit. The owners of the land then fled to the cliffs, and subsisted as best they could, until the barbarians from the north came down with their families and settled permanently with their families, driving their victims from the country. Then the persecuted people gathered together once more at the *Cristone* (a needle-shaped spire of rock on the San Juan River). Here they built houses in the caves and cliffs; erected fortresses, watch-towers, and store-houses; and dug reservoirs to supply themselves with water. After a prolonged battle their enemies were repulsed; but the conquerors retired to the deserts of Arizona and settled on the high bluffs of that region, where their posterity, the Moquis, live to this day.

In this transcription of Hopi oral tradition, Barber refers to the Hopis' belief that in the past, the earth was a small island. This statement agrees with other anthropologists' description of the place of emergence into this world as recorded in the Hopi Origin Myth. In Cushing (1923), Stephen (1929), and others, the place of emergence is described as being surrounded by water.

Barber suggests that Hopi migration all moved from north to south. "This supposition," he writes, "agrees with the traditions of the natives and is supported by the general appearance of the remains. Those farthest north are in the greatest state of decay, while as we advance southward they are much better preserved" (p. 593). Barber's findings on this point are incorrect; in fact, migration to the Mesas occurred from many directions.

Barber points to the remains of art and tools discovered in his excavations to substantiate his claim that the ruins extending throughout the region were occupied by ancestors of the Pueblo, Zuni, and Hopi tribes. He claims that the findings throughout the region are so uniform that "It . . . matters little what we call the ancients, whether Moquis, Zunis, or Pueblos, although for convenience and on account of their architectural peculiarities, we may term them the ancient *Pueblos*, or town builders" (p. 597).

Although the Colorado River is mentioned as one of the valleys with copious ruins left by these ancient town builders (p. 591), Barber offers no specific information about occupation of this river valley or migration from it.

Bartlett, Katherine

1934 Spanish Contacts with the Hopi, 1540-1823. *Museum Notes of the Museum of Northern Arizona* 6(12):55-60.

This short article summarizes Hopi contacts with Spanish officials during the period of Spain's rule in the Americas. It is brief but a very useful source for researching historical records from the period.

Bartlett, Katherine

1935 Prehistoric Mining in the Southwest. *Museum Notes of the Museum of Northern Arizona* 7(10):41-44.

Bartlett describes the mines prehistoric peoples in the Southwest worked to obtain turquoise, salt, and coal.

With respect to salt, Bartlett (p. 42) states,

> To appreciate the value of salt in ancient times we must imaging ourselves in a world with no sugar and very little salt, the state which the Pueblos enjoyed. To them, salt was a great luxury, for it could only be obtained in relatively small quantities, and the further they were from the source of supply the scarcer it was. Pueblo children were given rock salt to such as we would give our children hard candy. Thus we imagine that communities that had a source of salt nearby had wealth beyond compare as far as its trading value went. Like turquoise, it was one of the things most desired by the Indians, even until recent times.

In addition to salt mines at Camp Verde and at St. Thomas on the Virgin River, Bartlett notes there were two other salt sources (p. 42). These are the Zuni Salt Lake and the source in the Grand Canyon where the Hopis obtained salt.

Bartlett (p. 42) states, "A salt spring in the Canyon of the Little Colorado near its junction with the Colorado has been one source of supply for the Hopis for centuries."

Bartlett, Katherine

1936 Hopi History, No. 2: The Navajo Wars--1823-1870. *Museum Notes of the Museum of Northern Arizona* 8(7):33-37.

In this article, Bartlett summarizes the history of contact between non-Indians and the Hopi for 53 years, during the mid-nineteenth century. She gives source material and short descriptions of each contact she discovered in researching Hopi history.

The work is concise and useful in its own right, arguing that Hopis remained largely isolated from White culture during this period because of the buffer which Navajos created around them by their unlawfulness. Her work is, additionally, helpful as a launching pad for further research into the documentary history of the Hopi.

Bartlett, Katherine

1940 How Don Pedro de Tovar Discovered the Hopi and Don Garcia Lopez de Cardenas Saw the Grand Canyon, with Notes upon Their Probable Route. *Plateau* 12:37-45.

This article includes a reprinting of George Winship's account of the Tovar and Cardenas expeditions to Hopi and the Grand Canyon. The only real original parts of the work are Bartlett's description of Indian trails that the parties might have followed on their journeys. Bartlett offers one possibility for the route between the Zuni village, Hawikuh, and the Hopi Mesas. She offers two possibilities for Cardenas' trip to the Grand Canyon: one crossing the Little Colorado River via the Moenkopi wash; the other passing near Grand Falls on the way to the Havasupai village. Bartlett speculates that on the return trip, the party did not merely retrace its steps, but, rather, followed a wholly new route which passed right by the Hopi's sacred salt shrine near the confluence of the Colorado and the Little Colorado.

Bartlett, Katherine

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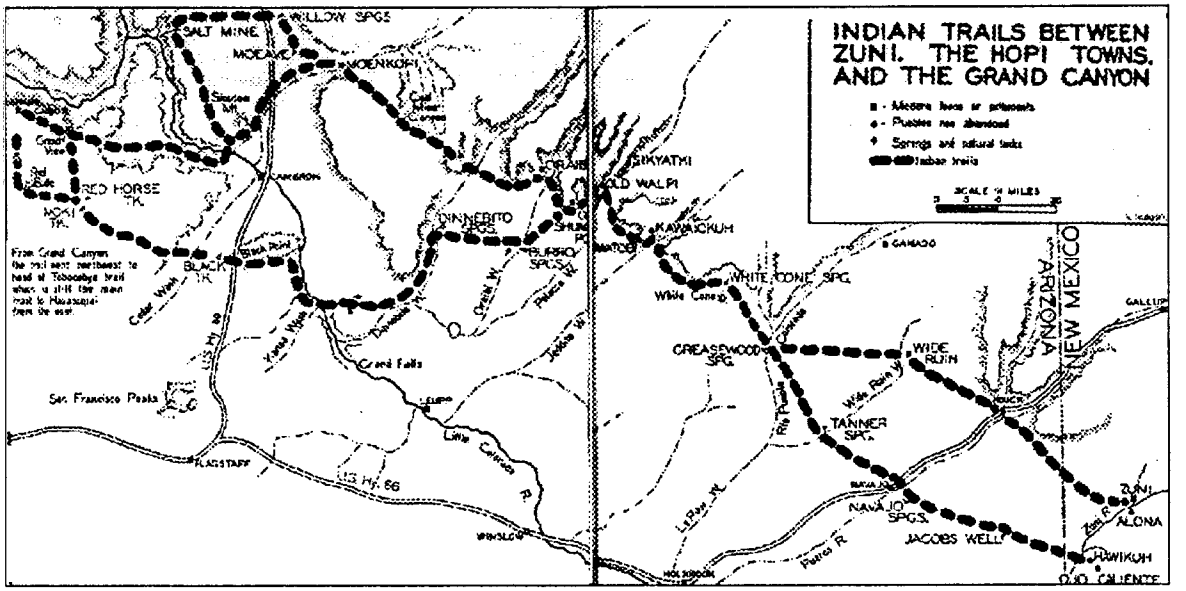
Bartlett includes a map of "Indian Trails between Zuni, the Hopi Towns, and the Grand Canyon," (reproduced below) based on historical descriptions of these trails by the non-Indians that used them. As described, these trails ran from water source to water source. On p. 43, Bartlett lists the major springs along the Indian trails she depicts and calculates the distances between these springs.



Bartlett, Katherine

1942 Letter to Alfred Whiting, November 9, 1942. Ms. SW-2, pp. 207-208, Whiting Collection, Cline Library Special Collections, Northern Arizona University.

This letter is one piece of a long correspondence between Bartlett and Whiting concerning trails between Havasupai and Hopi. In this letter Bartlett states that,

> My impression would be that trails across country to Hopi, etc. would have been the same for generations, and would undoubtedly have variants. We know that over so much of this country you can go anywhere, and as long as they found water, that was all they needed. Trails in the Canyon would be different, for they could wash out and become impassable, because of a cloudburst, or other "act of God."

Bartlett, Katherine

1942 Notes Upon the Routes of Espejo and Farfán to the Mines in the Sixteenth Century. *New Mexico Historical Review* 17:21-36.

Bartlett retraces the steps of two sixteenth-century exploration parties who traveled to mines with the help of Hopi guides. Bartlett contends that both parties visited the same mines, located in the Verde River Valley.

Her assertion differs from that of H. E. Bolton (1916), who claimed that Farfán visited mines in the region of the Bill Williams River, in western Arizona. Their two interpretations suggest different evidence about Hopi knowledge of their surrounding landscape.

Bartlett, Katherine

1943 Edible Wild Plants of Northern Arizona. *Plateau* 16(1):11-17.

Bartlett briefly reviews the principal wild plants used by the Hopis and other Native Americans in Northern Arizona. She offers a few interesting observations on Hopi ethnobotany and discusses the uses of several plants identified by the Hopis engaged in ethnobotanical research during the 1993 Hopi GCES river trip through the Grand Canyon.

Bartlett states (p. 11),

> The Hopi ... make some use for food, medicine, drugs, tools and the like, of almost every wild plant that grows on their mesas. The Navajo, on the other hand, use some wild plants but not all that grow in the area they dwell. To an ethnologist this difference confirms what is known from other evidence — that the Hopi have occupied their mesas for many centuries, while the Navajo are relative newcomers.

Bartlett classifies wild foods into seven categories, occasionally identifying specific use by the Hopis but more often generalizing the use to "Indians." The following wild food plants described by Bartlett were observed by Hopis in the Grand Canyon:

In the category "Nuts and Seeds," Bartlett includes *Pinus edulus* (Pinyon nuts); and *Yucca baccata and augustissima* (Spanish Bayonet yucca).

In the category "Berries and Fruits," are *Opuntia histricina* and *polycantha* (Prickley Pear).

In the category "Greens" are *Atriplex sp.* (Saltbush), for which Bartlett (p. 14) notes "The leaves and young shoots are used as greens by the Hopi, who boil them with meat;" *Stanleya* (Desertplume); *Cleome serrulata* (Rocky Mountain Beeplant), for which Bartlett (p. 14) notes, "Tender young shoots are used as greens by Hopi, and also dried for winter use."

In the category "Sources of Meal or Flour" are *Sporobolus giganteus* and *auroides* (Dropseed), for which Bartlett (p. 16) says, "Used by Hopis to make a fine meal;" *Oryzopsis hymenoides* (Ricegrass or Indian Millet), "Used by the Hopis to make a fine meal."

In the category "Beverages" are *Ephedra* (Mormon Tea); and *Rhus trilobata* (Squawbush), which Bartlett (p.17) says is "used by the Hopis to make 'lemonade.'"

Bartlett discusses many other plants in addition to the ones referred to above.

Bartlett, Katherine

1945 The Distribution of the Indians of Arizona in 1848. *Plateau* 17:41-45.

Bartlett presents in this short work a map of the Native American tribal distribution throughout Arizona in 1848. Because a static picture would be so incomplete, Bartlett includes an accompanying text which traces the historical background to this snapshot of a changing mosaic.

Bartlett writes that before 1150, "Pueblo peoples, like the Hopi, occupied" northwestern Arizona, which, by 1848, was inhabited by the Paiute Indians (p. 42). This territory is located across the Grand Canyon from where the Hopis were living in 1848 (and continue to live to the present.). She mentions nothing about Hopi migration from one side of the Canyon to the other.

Bartlett contends that "The valley of the Little Colorado had not been occupied since 1400, though it once supported a good population" (p. 44). She gives no information suggesting the tribal identity of these earlier inhabitants.

Batman, Richard (editor)

1988 *Personal Narrative of James O. Pattie.* Copper Mountain Books Inc., Missoula, MT.

Pattie kept a journal throughout his trapping escapades in the early years of the nineteenth century in the Southwest. He recorded in his journal that while trapping the Black River (probably the Salt River) members of his party ascended a northern fork of the river and met up with Hopis somewhere near the Little Colorado River (p. 65, n. 7). He wrote that (p. 61):

> our company divided, a part ascending one fork, and a part the other. The left fork heads due north, and the right fork northeast. It was my lot to ascend the latter. It heads in mountains covered with snow, near the head of the left and fork of the San Francisco. On the 16th, we all met again at the junction of the forks. The other division found that their fork headed in snow covered mountains, as they supposed near the waters of Red river [Little Colorado]. They had also met a tribe of Indians, who call themselves Mokee. They found them in no ways disposed to hostility. From their deportment it would seem as if they had never seen white people before. At the report of a gun they fell prostrate on the ground. They knew no other weapon of war than a sling, and with this they had so much dexterity and power, that they were able to bring down a deer at the distance of 100 yards.

Beadle, J. H.

1877 *Western Wilds, and the Men Who Redeem Them.* J. C. Chilton Publishing, Detroit, MI.

This book of Beadle's adventures and travels in the late nineteenth-century West provides some firsthand information about Hopis in the past.

Beadle came to the Hopi Mesas in June, 1872, for a four day visit. He stayed on First Mesa and reported information on Hopi eating habits, style of dress, cultivation of crops, and more. In his single effort to glean information about Hopi's beliefs and religion, he failed miserably. The Hopi man who Beadle interviewed provided evasive answers to all his questions. Beadle asked, "who made this *mesa,* these mountains, all that you see here?" The Hopi man answered simply that it is here and always was here. Beadle tried again, inquiring, "where do the dead Moquis go? Where is the child I saw put in the sand yesterday? Where does it go?" The reply: "Not at all. Nowhere; you saw it put in the sand. How can it go anywhere?" When asked about the purpose of ceremonial dances, the Hopi man replied: "The grandfathers always had them" (pp. 280-281).

Even Beadle himself realized that the simplicity of the Hopi man's answers resulted from distrust. He remarked in his notes that, "Probably they [Hopis] were too suspicious of a stranger to let me know anything about" their religion (p. 281).

Beaglehole, Ernest

1937 *Notes on Hopi Economic Life.* Yale University Publications in Anthropology, No. 15. Yale University Press, New Haven, CT.

Beaglehole's work provides much useful data on Hopi economic practices and organization from the nineteenth and early twentieth century. Concerning Hopi use of the Grand Canyon, Beaglehole writes:

> At the point Grandview, some miles west of Grand Canyon township, there is an old trail leading down to an ancient copper mine situated about half way from the rim. From this mine, quantities of copper ore are dug which, when ground down and mixed with water, make a serviceable greenish-blue pigment. Since Grand Canyon and the San Francisco Peaks passed on the journey are intimately associated with legend and katsina mythology, it is inevitable that an expedition to the Colorado partakes of something in the nature of a religious pilgrimage. Prayer feathers are deposited at appropriate shrines close to the foot of the Peaks, feathers and sacred meal are also left at a shrine in the mine after the ore is extracted (p. 56).

Beaglehole, Ernest

1937 *Notes on Hopi Economic Life.* Yale University Publications in Anthropology, No. 15. Yale University Press, New Haven, CT.

Beaglehole's monograph provides useful information about Hopi economic practices and social organization in the early twentieth century, including Hopi use of salt and the Grand Canyon.

With reference to salt, Beaglehole (p. 52) writes,

> One of the products of the more widely extended environment that the Hopi gathers at regular intervals is salt. Formerly this was obtained from deposits in Marble Canyon, close to the Grand Canyon. Prayer sticks were deposited at the shrines of the Salt Woman and the Twin War Gods near the Canyon and the men either suspended themselves with ropes from the rim of the Canyon and broke off stalactites of salt from the sides of the cliff or else clambered down to the floor of the Canyon by means of ropes, trees and a step ladder and obtained salt from the Canyon bottom. This salt was brown in color, a soft rock salt, easily ground down but when added to food it turned the latter a yellowish color. The Canyon deposits later became too difficult of access and salt today is obtained almost exclusively from the salt lake forty-two miles south of Zuñi, through Mishongnovi men on occasion used to obtain some salt from deposits on the wash southeast of the mesa.

Beaglehole provides a long description of salt pilgrimages from Second Mesa to Zuni Salt Lake (pp. 52-53). Like salt pilgrimages to the Grand Canyon, Hopi expeditions to Zuni salt lake were associated with a number of ritual activities and religious offerings.

Regarding pigments, Beaglehole (pp. 55-56) says,

> Although many pigments and dyes are obtained from wild plants and clay deposits close to the mesas and are gathered when required, two, however, require expeditions to the Colorado River to be obtained and were usually collected on journeys for salt. Today special expeditions are sometimes made to get these colors, yellow ochre and copper carbonate. At the point Grandview, some miles west of Grand Canyon township, there is an old trail leading down to an ancient copper mine situated about half way from the rim. From this mine, quantities of copper ore are dug which, when ground down and mixed with water, make a serviceable greenish-blue pigment. Since Grand Canyon and the San Francisco Peaks passed on the journey are intimately associated with legend and katsina mythology, it is inevitable that an expedition to the Colorado partakes of something in the nature of a religious pilgrimage. Prayer feathers are deposited at

Beaglehole, Ernest and Pearl Beaglehole

1935 Hopi Death Customs. In *Hopi of the Second Mesa* by Ernest and Pearl Beaglehole, pp. 11-14. Memoirs of the American Anthropological Association 44.

The Beagleholes report that data on Hopi death customs is difficult to collect because the Hopis are reticent to discuss death. This brief article is thus based on information from a very small sample of Hopi funerals.

Several aspects of Hopi burial customs relate to deceased adults becoming clouds. After death the face of the corpse is covered with raw cotton, "which signifies its future existence as a cloud" (p. 14). After the deceased person is buried, prayer feathers and a pottery bowl of corn meal is taken to the grave." The meal is to feed the spirit of the dead man, the prayer sticks to help it on its journey and to help it easily to become a cloud" (p. 15).

> appropriate shrines close to the foot of the Peaks, feathers and sacred meal are also left at a shrine in the mine after the ore is extracted (p. 56).

Beaglehole (p. 74) notes that abstinence from salt is part of the puberty rituals for young girls.

Beaglehole (p. 84) states that the Hopi carried on an extensive trade with the Havasupai. Historically, the Hopis exchanged woven goods of all kinds, storage pottery, stone and shell beads, and other goods obtained from Spaniards and Indians to the east, including silverwork, buffalo hides, red cloth, iron tools, horses. From the Havasupai the Hopis obtained tanned deer, antelope, and mountain sheep skins, skin shirts and leggings, mescal, piñon nuts, baskets, sheep horn ladles, and abalone shells.

According to Beaglehole (p. 85), "The rates of exchange for Hopi blankets were as follows: a large bed-size blanket for two larger buckskins and one other small skin, a small saddle blanket for one small buckskin, a white wedding blanket with red stripes for a shell necklace, a blanket similar to the last for a (five pound) sack full of red ochre."

Beaglehole (p. 85) says, "Anciently, according to informants, the Hopi always visited the Havasupai and Walapai as a side expedition to other journeys made to the Colorado River shrines or salt mines. When these journeys to the Colorado grew rare, the Havasupai came more frequently to the Hopi villages, and Oraibi became a meeting place for Havasupai and Hopi traders." Beaglehole suggests that in earlier periods the Hopis obtained iridescent shells and parrot feathers from the Gulf of Mexico and Mexico in similar trade conducted to the west of Hopi.

Beaudoin, Kenneth Lawrence
1951 *The Wuwuchim.* Salter House, St. Louis, Missouri.

This greatly abridged version of the Hopi emergence narrative is translated into English and presented in the form of poetry. The edition was limited to 150 copies.

Benedict, Ruth

1925 Review of *The North American Indian* by Edward S. Curtis. *American Anthropologist* 27(3):458-460.

Benedict favorably reviews *The North American Indian.*

With respect to the Puebloan oral traditions recounted by Curtis, Benedict says (p. 460), "The volume contains also valuable mythological material. The clan myths, compared with those already published and with Miss Ruth Bunzel's manuscript, are in their diversity of inc[i]dent a self-sufficient rebuttal of their historicity."

Bieber, Ralph P. (editor)

1974 *Exploring Southwestern Trails, 1846-1854 by Philip St. George Cooke, William Henry Chase Whiting, Francois Xavier Aubry.* Philadelphia: Porcupine Press.

Of the three frontiersmen Bieber discusses in this book, Francois X. Aubry was the only one who traveled within the vicinity of the Hopi Mesas. In the years 1853-1854, Aubry past south of the Hopi villages while surveying a possible railroad route along the 35th parallel (which by and large traverses the Colorado Plateau and intersects the Little Colorado River at about its halfway point).

Although Aubry kept a journal throughout his explorations, he included no information about the Hopi.

Billingsley, M. W.
1971 *Behind the Scenes in Hopi Land.* Privately printed in the United States.

This autobiographical book, subtitled "The Only Authentic White Chief of the Hopi Indians," is an exercise in self-glorification. Billingsley was a resident of Arizona who maintained close ties with a set of Hopi men. Among Billingsley's many "accomplishments" were the construction of a "kiva" at his home in Glendale, and the production of a performance of a "Snake Dance" in the nation's capital, Washington, D.C.

The following passages (p.100) in the book are possibly relevant to Hopi clan history as reconstructed by Eric Polingyouma:

> In 1923 I headed an expedition in Central America with these Hopi Indians in conjunction with Dr. Fewkes of the Smithsonian Institution in Washington, D.C. We traced the hieroglyphics and pictographs from Arizona to the Yuccatan border where in our excavations we found Hopi Katchinas and emblems. We were excavating in Mexico at that time under permits of President Obregon. This picture was taken in the throne room of the national palace in Mexico City. Here you see Hopi Indians and myself are in the company of President Obregon. We were his guests in the National Palace. There you see on the left of the throne is myself and then on the right is President Obregon. The two Mexicans in uniform are palace guards and the other Mexicans in civilian clothing were in charge of the detachments of the Mexican soldiers that were our guards while on the expedition into ancient ruins between Popogtitple and the Plain of the Sleeping Woman.
>
> However, we have established the origin of the Hopi people according to Dr. Fewkes of the Smithsonian in Washington; Dr. Owen of the Field Museum in Chicago; and Dr. Cummings of the University of Tucson, Arizona.
>
> The Hopi are the descendants of the pyramid builders of Central America who migrated north building their cliff and pueblo dwellings from the materials they could find at hand. So the Hopi are of the Mayan stock and not of the Aztec.

The photograph Billingsley refers to shows the Hopis dressed in Plains Indian War Bonnets (p. 99). A second photograph shows the Hopis at a Mayan temple dressed in more traditional clothes and headbands (p. 100). This second photograph states "Hopi emblems and Pahoes were much in evidence in these ruins."

Since Billingsley does not present any archaeological data, his claims of finding Hopi kachinas and emblems are impossible to evaluate or confirm using a scientific perspective. His expedition with Hopi elders, however, does represent a long-standing interest the Hopi people have in cultures of Mexico stemming from Hopi oral history of clan migrations.

Bindell, Stan

1991 Petroglyphs Get First Cleaning. *The Navajo-Hopi Observer.* October 9, 1991, p. 2.

This newspaper article describes how Vanessa Brown, a resident of Tuba City of Navajo, Sioux, Mohawk-Seneca and German ancestry, and her sister Kazuko Toelken, of Japanese, German and Iroquois ancestry, used acetone to erase the painted graffiti at the Hopi petroglyph site of Tutuveni. The article notes Tutuveni is recognized in the Navajo Nation Historic Preservation Plan as a Hopi religious site and is also recognized by the National Register of Historic Places.

Bishop, Francis Marion

1947 Letters of Captain F. M. Bishop to the Daily Pantagraph. *Utah Historical Quarterly* 15:239-53.

Bishop was a member of the second Powell expedition to the Grand Canyon region. In these brief updates of the trip to the newspaper of Bloomington, Illinois (where Bishop attended college), Bishop includes topographical, geological, and ethnographic information, as well as anecdotes, itinerary reports, and personal impressions.

In one letter he discusses the existence of ancient ruins within the Grand Canyon. He ponders their significance in his correspondence, writing (pp. 249-50):

> There is something in the gloomy silence of ancient ruins which has a deep, subtle influence upon the mind of a thoughtful observer. He cannot stand or walk over the shattered, broken and decaying relics of a nation without feelings of sadness and regret at the fate of the busy throngs that once swept where he now stands, amid the most profound stillness.

Bishop recognizes that these ruins are evidence that "Nature has not been the sole worker in the cañons of the Colorado, nor on the cliffs and in the valleys of this wilderness of rocks." He realizes that societies existed there before in large numbers, and they left their mark on the landscape. He writes (p. 250):

> Everywhere, on mountains, in valleys, and in caves, are scattered the relics of a once numerous people. What are these relics of evidences of former occupation? you ask. I answer, the ruins of villages long since deserted. Keva's, [sic] or temples of worship, buried by the accumulated dust of centuries; houses of stone and dwellings in caves; histories written in hieroglyphics upon cliffs and cañon walls; fragments of pottery of every description, colored and plain; pathways up seemingly inaccessible cliffs by footholds cut in the rock, and ladders of poles; but the hands that wrought and the feet that once trod these mountain paths are gone--all these are relics of former occupation, for they are nor found here and there merely, but are everywhere.

Bishop mentions, specifically, that at one time Hopi people inhabited an extensive portion of this Grand Canyon country. He reports that "[t]here is a tradition among the Shenomos, or Moquis Indians, to the effect that their tribe once lived over this entire country, and that disease and war have finally reduced them to the little handful now living in the "Seven Cities" of northern Arizona, which seems quite probable (pp. 250-51)."

Black, Robert A.

1964 *A Content Analysis of 81 Hopi Indian Chants.* Unpublished Ph.D. dissertation, Department of Anthropology, Indiana University.

Black analyses 81 secular chants by town criers making roof top announcements at 10 Hopi villages on all three mesas. The primary purpose of secular chants (p. viii) is to "communicate information and news which is of concern to the village as a whole, or to individual inhabitants in particular. They serve to mobilize cooperative participation of the villagers for communal activities, such as work parties, hunting and festivities, as well for voicing individual grievances, and complaints."

Black illustrates the categories of Hopi verbal behavior in a tree-diagram in which casual discourse (conversation) is distinguished from non-casual discourse (p. x). Non-casual discourse includes the categories of folktales, chants, and songs with words. Chants includes two subcategories: secular chants and religious, non-secular chants.

Chants consist of a number of statements made within the framework of a series of musical pitches that serve to relay the message to the whole village by projecting the voice for a distance of up to half a mile (p. xi).

Black notes that Voegelin and Euler (19570 analyze non-secular, religious chants, which are more formal than secular chants, and are only made by the person holding the hereditary office of the Crier Chief.

Bloom, Lansing B. (editor)

1931 A Campaign Against the Moqui Pueblos. *New Mexico Historical Review* 6:158-226.

In 1716, the Governor of reconquered New Mexico, Phelix Martinez, came to Hopi for the express purpose of "reducing" the Hopis once and for all and also to bring back those Pueblo Indians from the east who had taken refuge at Hopi. Bloom collected Martinez's correspondences from this expedition and tried to reconstruct the events of this expedition.

There is little ritual information about the Hopi included in Martinez's writings. Editor Bloom's conclusion about the expedition is that it served "only [to] confirm them [the Hopis] in what Governor Martinez terms their 'apostasy'" (p. 164).

Bradfield, Richard Maitland

1973 *A Natural History of Associations, A Study in the Meaning of Community.* Duckworth, London.

This two volume ethnological study includes an extensive discussion of the Hopis to exemplify how culture and community and related.

On p. 40, Bradfield notes that the Hopi salt expeditions are closely linked with death and burial. He draws upon Titiev's (1937) and Beaglhole's descriptions of salt expeditions to describe the basic features of the ritual pilgrimages (pp. 40-31). Bradfield then notes (p. 41),

> The only point to which I wish to draw attention in this narrative, before passing on to consider death and burial, is the parallel between the man's return from a salt expedition and the woman's emergence from child-birth. Both are periods of danger: out of which the man passes by having his hair ceremonially washed and new names bestowed upon him, and out of which the woman passes, again by having her hair washed, and by having her body 'fumigated' in juniper steam. In the rites surrounding death and burial, we shall find these two sequences brought into juxtaposition.

Bradfield (pp. 41-42) observes that the continued existence after death is well defined in Hopi religion. The *hi'ksi* ("breath") is immortal and at death leaves the body through the mouth. The *kya'a* (eldest paternal aunt) washes a deceased man's hair and dresses it, washes the dead body, and gives the corpse a new name. The deceased man's father or other male relatives prepare prayer feathers and a *püh'tabi* (road) consisting a cotton string about three feet long with a feather at one end. The father blackens the chin and places a "white-cloud mask" of raw cotton over the face. Bradfield remarks (p. 42), "The underlying idea behind each of these ritual elements is the same: namely, that the 'breath body' may be light, not 'heavy' (*pe'te*), and so be enabled to go on its way to the land of the dead." The women who place offerings of food and vessels of water in the grave say or imply "You are no longer a Hopi, you are changed [*nih'ti*, grown into] a katçina, you are Cloud [O'mauwû]. You are to eat once of this food, i.e. accept this food offering, and when you get yonder, you are to tell the chiefs [i.e., of the six directions] to hasten to bring the rain clouds here." In the process of leaving the corpse, the "breath body" undergoes a metamorphosis into katçina or Cloud.

For three days after the interment, bowls of food are placed at the grave. On the third day, the father or uncle of the deceased makes prayer-offerings and takes these to the grave. A *püh'tabi* (road) is laid on the ground pointing to the west of the grave. Four parallel lines are drawn across the trail to the village to make certain that the spirit does not return there. Upon returning home, all the members of the household wash their hair and ritually purify themselves in the smoke of a fire. Bradfield states (p.44),

> Early in the next morning, according to Hopi belief, the 'breath body' (*hi'ksi ah'paa*) of the dead person rises from the grave, partakes of the 'breath' of the food, mounts the 'breath' of the single black prayer-stick, and then travels westward along the 'road' to the house of the dead, taking the 'breath' of the double green *pa'ho* with it as an offering to the Masau'u.

Bradfield (pp. 44-45) thinks the hair washing and naming rituals that accompany burials signifies a change in status comparable to birth or initiation. With respect to the salt pilgrimage, Bradfield states (p. 45), "Clearly there is an element of 'danger' in the situation, in that the salt deposits are located near the home of the dead and to fetch salt requires special precautions (e.g., abstinence from sexual intercourse); but the fact that the head-washing is followed by name-giving indicates that the element of 'danger' is outweighed, in Hopi thinking, by that of the change of status involved."

In Chapter 12, "A Pueblo Liturgy," Bradfield (pp. 46-55) articulates what he considers the underlying concepts of the Hopi religion, including the most fundamental concept of belief in the continuity of life after death. He also describes color symbolism, katsinas, prayer feathers and prayer sticks, and the ceremonial cycle.

Bradfield (p. 208) notes that while approximately 120 clan names have been recorded for the Hopi villages by six independent field workers, all of these clans are (with only a few exceptions) placed into the same twelve phratries on the three mesas. Bradfield (pp. 208-240) analyzes the associations of ideas, traditional history and ceremonial referents that relate to these phratry groupings.

The ritual collection of eagles and their role in Hopi ceremonies is reviewed on pp. 238-240.

In a chapter on the "Social Morphology: The Hopi," Bradfield (pp. 414-436) reviews parallels in actual items (i.e., ritual elements, deities, and ceremonies) and in underlying principles between the Hopis and Maya culture in the Yucatan. Bradfield suggests Hopi culture is historically related to the Mayan culture.

Bolton, Herbert Eugene

1916 *Spanish Exploration in the Southwest, 1542-1706.* Charles Scribner's Sons, New York.

In this work, Bolton presents exploration documents from Spanish expeditions into today's Southwest. Records from two expeditions who visited the Hopi Mesas, the Espejo and Oñate expeditions, are included in the collection of records.

Information can be found in these documents which clearly demonstrates Hopi knowledge of the Colorado River. Zárate (1626) claimed that Oñate learned from Hopis that the Little Colorado River "runs from southeast to northwest, afterwards turning to the west, and they say it enters California" (p. 269). He goes on to say that from California, the Colorado River continues to the sea.

Bolton, Herbert Eugene (editor)

1928 Escalante in Dixie and the Arizona Strip. *New Mexico Historical Review* 3:41-72.

Bolton presents in this journal article, his translation and edition of a portion of Friar Silvestre Velez de Escalante's travel diary from 1776. Included in the text is some interesting information documenting a trail system linking the Hopi Mesas with Paiute territory on the north side of the Grand Canyon.

Bolton, Herbert Eugene (editor)

1948 (1919) *Kino's Historical Memoir of Pimeria Alta: A Contemporary Account of the Beginnings of California, Sonora, and Arizona, 1683-1711,* by Eusebio Francisco Kino. Vol. 1. University of California Press, Berkeley.

Kino performed missionary work in today's Southwest for 24 years. During this extensive period, he tried to contact the Hopi many times, sending them letters and messages, but they never responded. Kino mentions the Hopis a few times in his memoir, but discusses only their apostasy and his inability to bring them under the Christian fold.

Bolton, Hubert Eugene

1949 *Coronado on the Turquoise Trail: Knight of Pueblos and Plains.* Coronado Cuarto Centennial Publications, 1540-1940, vol. i. Albuquerque: University of New Mexico Press.

In his customary way of writing history in a thorough, yet grandiose style, Bolton provides a full account of the Coronado Expedition to New Mexico and Arizona in the sixteenth century. In the chapter entitled, "Hopis and Grand Canyon (pp. 133-42)," Bolton pays particular attention to the Tovar and Cardenas' expeditions to this western region.

Bolton points out that the Zuni guides who led Tovar to the Hopi Mesas "presumably took him over the accustomed route by which the Hopis periodically came to the famous Zuni salt lakes to supply their needs (p. 135)."

In his discussion of the Cardenas expedition to the rim of the Grand Canyon, Bolton surmises that the party must have witnessed the canyon from a place near Grand View. Bolton writes (p. 139):

> The approximate region where the gorge was first reached by the explorers can be conjectured from the description given by Castaneda. The evidence indicates that it was in the vicinity of Grand View. The country was high, dry, "open to the north," and covered with low and twisted pines. It is at Grand View that vision sweeps north as far as Vermillion Cliffs and Lee's Ferry, some fifty miles away.

Bolton, Herbert Eugene

1949 *Coronado: Knight of Pueblos and Plains.* University of New Mexico Press, Albuquerque.

Bolton provides a very thorough reconstruction of Coronado's 1540-1542 expedition into today's Southwest. Included in the text is a chapter on the expedition's survey of Hopiland and the Grand Canyon. Bolton provides a good synthesis of all the extant documentation from the Europeans' first encounter with the Hopis.

Bolton points out that Zuni guides led the Spanish explorers to the Hopi Mesas and probably took them "over the accustomed route by which the Hopis periodically came to the famous Zuni salt lakes to supply their needs" (p. 135).

Bolton (p. 138) notes that after tracing Tovar's trail to Tusayán, Cárdenas was well received by the Hopis and given lodgings, liberal supplies, and guides to the "Great River." Cárdenas reported that the Hopis said it was a twenty day journey over unihabited country before reaching the settlements that Bolton infers were those of the Havasupai.

He surmises that the explorers who traveled to the Grand Canyon with help of Hopi guides, must have witnessed the canyon from a place near Grand View. Bolton writes (p. 139):

> The approximate region where the gorge was first reached by the explorers can be conjectured from the description given by Castaneda. The evidence indicates that it was in the vicinity of Grand View. The country was high, dry, "open to the north," and covered with low and twisted pines. It is at Grand View that vision sweeps north as far as Vermillion Cliffs and Lee's Ferry, some fifty miles away.

Bourke, John G.

1892 *On the Border with Crook.* Charles Scribner's Sons, New York.

Bourke recounts his adventures while serving as part of General George Crook's troops in the West. In states that 1874 he visited the Hopi Mesas with Crook to investigate news that Hopis had been selling arms and ammunition to the Apaches. The Hopis had supposedly been obtaining the trade items from their neighbors across the Colorado River, the Utes and the Mormons. The American officers learned that the report was, in fact, true. Crook sternly warned the Hopis not to continue this form of enterprise. He then departed Hopi and appears to have never returned (p. 230).

Bourke, John G.

1984 *The Snake-Dance of the Moquis of Arizona.* University of Arizona Press, Tucson. (Originally publication: Scribner, New York, 1884).

In 1880-1881, Bourke visited the Hopi Mesas and recorded some interesting information about Hopi ties to the Colorado River system.

He recorded a story from Hopi oral history which describes the advent of sea shells into Hopi culture and the origin of the Hopi Snake Clan and the Snake Dance. He wrote (p. 177):

> As to the sea-shells seen before the altars, he [Hopi informant with clan affiliations with *Hushpoa* or chapparal cock clan and *Quingoi* or oak clan] remarked as follows:--"Many years ago the Moquis used to live upon the other side of a high mountain, beyond the San Juan River" (in the extreme S. W. corner of Colorado. This is the same mountain which the Navajoes call Notizan). "The chief of those who lived there thought he would take a trip down the big river to see where it went to. He made himself a boat of a hollow cottonwood log, took some provisions, and started down. The stream carried him to the seashore, where he found shells. When he arrived on the beach he saw on top of a cliff a number of houses, in which lived many men and women. They had white under their eyes, and below that a white mark. . . . That night he took unto himself one of the women as his wife. Shortly after his return to his home the woman gave birth to snakes, and this was the origin of the snake family (gens or clan) which manages this dance [the Snake Dance]. When she gave birth to these snakes they bit a number of the children of the Moquis. The Moquis then moved in a body to their present villages, and they have this dance to conciliate the snakes, so they won't bite their children.

This account is the earliest written documentation of the Hopi's story of Tiyo. The content of Bourke's rendition of this Hopi oral history demonstrates that part of Hopi culture derives from a connection to the Colorado River.

Earlier in his account, Bourke stated specifically that shell bracelets were worn exclusively by men of high status. "[I]ndeed," he wrote, "I have never detected them upon the wrist of any Moqui or Zuni who was not invested with some trust or dignity of great importance in the eyes of his tribe" (p. 142). The trade in sea shells seems to have played an important part in perpetuating status distinction in Hopi society.

Brew, J. O.

1941 Preliminary Report of the Peabody Museum Awatovi Expedition of 1939. *Plateau* 13:37-48.

This preliminary report provides the findings of the fifth, and last, field season of archaelogical research in the Jeddito Valley and Antelope Mesa in northeastern Arizona. Also included is a summary of the findings of the whole five-year project. The information collected demonstrates Hopi occupation of these abandoned ruins from about 500 A.D. until around 1700 (p. 40).

The author, Brew, comments that some of the larger sites, including Awatovi, Kawaika-a, Chakpahu, Nesuftonga, Kokopnyama, and Lululongturqui, "were comparable in extent to the modern Hopi towns" (p. 38). He adds that "Either Awatovi or Kawaika-a was presumably the first of the Tusayan towns encountered by Tobar in 1540" (pp. 38-39). Awatovi was the place of contact for both the Espejo and Onate expeditions.

Brew, J. O.

1949 Part I of Franciscan Awatovi. *Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University,* Vol. 36. Cambridge, MA.

Brew researched and summarized the historical records dealing with Hopis, especially in Awatovi, during the Spanish period. He dedicates a substantial part of his history to the missionary and reconquest periods of Awatovi. None of the information which he reported included statements about Hopi ties to the Grand Canyon.

Brew states that, although a contested point, he believes that other Hopis were responsible for the sacking of Awatovi in the winter of 1700-1701 (pp. 18-22).

Brew, J. O.

1979 Hopi Prehistory and History to 1850. In *Southwest*, edited by Alfonso Ortiz, pp. 514-523. Handbook of North American Indians, vol. 9, William G. Sturtevant, general editor. Smithsonian Institution, Washington, DC.

This is a general history of Hopi culture to 1850. In the article, Brew makes one statement about Hopi and the Grand Canyon. He reports that in 1540, García López de Cárdenas visited the Hopi and was given guides to take him to the Grand Canyon. He writes (p. 519):

> The expedition discovered the Grand Canyon of the Colorado, but since the Spaniards could not even find a trail down from the rim, the discovery did not result in a practical route to the Gulf of California. The failure of the party to find a way down suggests that perhaps Cárdenas did not have the complete cooperation of his Hopi guides.

Brown, Jo Jeffers

1966 Rain Song: The Story of the Hopi Snake Dance. *Arizona Highways.* August 42:2-11.

This article for the popular press includes some interesting information about the Hopi Snake Dance. Generally, the author presents Hopi people and practices in a very favorable light. Too frequently, however, Jeffers slips into that irritating tone of the "noble savage" myth. This tendency diminishes the worth of the article.

As part of Jeffers' effort to educate his audience about the meaning and importance of the Snake Dance, the author writes: "To the Hopi, the snake is sacred, a messenger to the gods of the Underworld, where man once lived before he emerged out of the first 'sipapu' onto this earth. An ancient and respected brother to be revered, not feared" (p. 2).

Jeffers also tells us that Huru-ing Wuti is the Goddess of Hard Substance who Lives in a "western ocean kiva" (p. 2).

Brugge, David M. (editor)

1964 Vizcarra's Navajo Campaign of 1823. *Arizona and the West* 6:223-244.

During its brief period of rule in the Southwest, the Mexican government had little contact with the Hopi. It seems that only one Mexican official ever visited the Hopis. In the year 1823, the governor of New Mexico, Jose Antonio Vizcarra, came to the Hopi Mesas as part of a campaign waged against Navajos in the region.

In his journal, Vizcarra mentioned using Hopis as guides in the area between the Mesas and the Little Colorado River, and possibly to the river's gorge (pp. 231, 233-235). Yet, otherwise, Vizcarra offered no substantive information about the Hopi.

Bunte, Pamela A. and Robert J. Franklin

1987 *From the Sands to the Mountains: Change and Persistence in a Southern Paiute Community.* University of Nebraska Press, Lincoln.

The authors of this work on Southern Paiute history and culture, document that part of the Southern Paiutes' past was a tradition of trade with the Hopis. They provide evidence from Friar Escalante's journal that a trail system existed in the eighteenth and nineteenth centuries which connected Hopis with Paiutes living on both sides of the Colorado River.

Bunte and Franklin state that along the route from Southern Paiute territory to the Hopi Mesas, there was evidence of human maintenance of the trail. They argue that the existence of a stairway and other improvements to the route, "bespeak the importance of the road and the interaction which took place along it" (pp. 42-43).

Bureau of Indian Affairs

1955 *Hopi Hearings, July 15-30, 1955.* Hopi Agency, Phoenix Area Office, Bureau of Indian Affairs.

This is a transcript of hearings that the Bureau of Indian Affairs held at several Hopi villages in 1955 to document Hopi concerns about tribal and federal governance, land claims, and related issues.

Many Hopis discussed the pact of stewardship the Hopis made with Masaw when they first came upon this land and how the Hopi people are obligated to live according to the life principles Masaw established.

These Hopis include Dan Katchongva of Hotevilla (pp. 23-26), David Monongye (p. 44), Andrew Hermequaftewa (pp. 79-87), George Nasoftie (pp. 81-82),

Andrew Hemequaftewa described how the first people got their clans during the migrations that followed their meeting with Masaw. He says (p. 82),

> Many people came directly to this area and somewhere the first group found a dead bear lying in their path and another group came along and found all the hair had fallen of, leaving only the hide and from this the people who made came there made straps from the hide, and they became the Strap Clan, and another group found the bear's hair buried in the ground by a gopher and they took their clan name from the gopher and they became the Gopher Clan. The next group found a spider inside of this bear's body and there were cobwebs all over inside and they became the Spider Clan, and then another group came along and found the bear's body but it was full of holes and grease was all around it, and the became the Grease Cavity Clan. Then another group came along and found nothing but bluebirds sitting on top of the bear's skeleton, and they became the Bluebird Clan. This is how the first people go their clans.

With respect to shrines, Hermequaftewa (p. 86) says,

> Our land is divided among [us] our shrines are established in the various directions for the purpose of prayer altars where we are to offer our prayers. The land we which we considered as our land was from shore to shore. We were given the privilege of using all the waters for the springs; such law was given to us in its completeness ... These shrines are marked at San Francisco Peaks, Navajo Mountain, and at a place they call Salt down south at Zuni.

Peter Nuvamsa read into the record the petition that Shungopavi submitted to the Indian Claims Commission, mentioning the map that accompanied the petition (pp. 110-114). Nuvamsa (p. 111) refers to the Hopi land (Tutsquat) as "fixed in our traditional life and which we must use in our traditional way in carrying out traditional practices and

Byrant, H. C.

1944 Memorandum for the Files, January 17, 1944. Ms. on file at Hopi Cultural Preservation Office.

This memorandum describing the first roads to the Grand Canyon was written by the Superintendent of the Grand Canyon National Park, based on a conversation with Dan Hogan. Hogan arrived at the Grand Canyon in 1890. With regard to the Moqui Trail, Bryant states, "The first road to Grand Canyon from Hance's Place followed along the old Moqui Trail to the vicinity of Rowes Well and then up the canyon, which the railroad now follows, to the rim."

regulations." Included in section of the petition that describes the land and its purpose is the statement "It is upon this land that we made trails to our salt supply" (p. 112).

Viets Lomaheftewa stated that in the late nineteenth century his grandfather Honanie went to Washington to present the land claim of the Hopi people (p. 114). The Hopis returned with the understanding that the government officials would respect the Hopi's land.

Charlie Homehongva described a Hopi "tradition which in our minds is believed and to our thinking is true" (p. 148). He says (pp. 148-149),

> We all know there was a meeting called many years ago on Old Oraibi. There the representatives of the villages met and they took into consideration this land question and as they talked they brought up the fact that there was a generation of children growing up and that they had to be cared for and they had come specifically for the purpose of trying to establish land that would be sufficient to take care of our future generation of children, our own children, our nephews, our nieces, our grandchildren. So they said "Loloma" - he was chief at Old Oraibi - "You designate your area first." Loloma designated as a starting point Navajo Mountain. He said that will never go away. Then it followed the ridge on to the Grand Canyon up to the point where there was a spring that leads up near the route that goes to Supai Canyon and that was the road he designated for himself. And then they turned to Seetpella, the representative from Shungopavy. He designated the area up and around Williams - that is now Williams, Arizona. From there he went south to Turquoise Lakes and also included San Francisco Peaks because that was their eagle hunting area. That was the area he designated. It came then next to Sipaulovi's turn. Takanilsie - he was the spokesman for that village. He continued from where Shungopavy left off, taking in the mountain ridge south of Winslow over to the Woodruff mountains. Then came Mishongnovi's turn and its representative was Tawimoke. He designated the area from the Woodruff mountains on east to the Salt below Zuni and said that Salt area there was to be held open for both Sipaulavi and Mishongnovi so that they could get their salt there. From that point they came north to a place on this side of Ganado which they called Red Point. There they drew a plaque on the rocks. Then came Walpi's turn. Their spokesman was Iss. He continued the line from Red Point on the north to a point beyond Burnt Corn. That was the area he chose for his people. Following came Beeva, a representative of the Tewa village. He continued from that point and joined the land again at Navajo Mountain. This was the land that they designated for themselves to be used by their people. They said whereas it is true that there were many ruins across the country, the fact that they became ruins, the fact that they became ruins was testimony to the fact that something was wrong and much of this land in time may be taken back by the whites and many of the Hopis will not come back ... This is the way the

meeting was run at Old Oraibi. These are the points that were made at that village. I respect them.

John Lomavaya of the First Mesa Snake Clan related an account of the boy from Navajo Mountain that traveled down the river in a hollowed-out cottonwood log (pp. 339-341), bringing back to his people the Snake ceremonies. He said in part,

> While they were living at Navajo Mountain, the Chief's son happened to sit on the edge of the river that was flowing by the village. He was wondering where the body of water was coming from and where it is flowing to. While he was wondering, he made up his mind to try to find out, because of his curiosity, where that river flows into, and he intended to follow it. I said he intended to follow the river where it flows to. So he cut himself a cottonwood tree and hollowed it out and he covered with this cottonwood with a lining of pitch to make it water-proof. He also made an opening and furnished himself also with a rod so in case he wants to go on he can push himself. So when he got ready he prepared enough food to go along, got inside of what he had made and closed the opening and lined it with pitch and used the rod to roll himself into the river. As he started to float down the river he noticed that because of no vibration or movement of what he was occupying, he opened the port-hole and look out and discovered that he had drifted ashore among river trash, or the things that collect on a river bank. So he prodded with his rod and floated down again. The second time he noticed that the thing that he was drifting in was still, he again opened the hole and when he looked he saw a great body of water, but on account of the waves it pushed him to the shore. He saw the land and also the big body of water. He must have reached the ocean ...

Lomavaya also discussed the Hopi tradition of the Franciscan Fathers who required the Hopis to go to the Colorado River to get sweet water. He adds (p. 341), "In those days it is very dangerous for anyone to travel. Many did not return, and when the fair maidens, girls, grow up, these people liked to keep them together all alone. After discovering this they all decided to get rid of them."

Byrkit, James W.
1988 The Palatkwapi Trail. *Plateau* 59(4):1-32.

Byrkit reviews the history of a trail from the Hopi Mesas to the Verde Valley. As Byrkit notes, this trail was used continuously by the Hopis and a few others well into the twentieth century. As described and mapped by Byrkit (pp. 28-29), the trail runs in a southerly direction from First Mesa past to Comar and Chandler Springs, across the Little Colorado River east of Winslow and the Sunset Crossing, where the trail turns to the southwestward, through Sunset Pass and Chavez Pass, where the trail then heads westward to Jerome. Brykit describes how the Hopis, the Spanish explorers Espejo and Farfán, and the American military expeditions of the mid-nineteenth century all used this trail.

Byrkit calls this the Palatkwapi Trail because he considers Palatkwapi, a site that figures prominently in Hopi traditional history, to have been in the Verde River valley where the trail terminates. Byrkit (pp. 4-6) does acknowledge, however, that the exact location of Palatkwapi is controversial and that the Hopis suggest there are several alternative locations for this site.

Camp, Charles L. (editor)

1923 The Chronicles of George C. Yount: California Pioneer of 1826. *California Historical Society Quarterly* 2:3-67.

In this article, Camp edits the papers of Reverend Orange Clark who recorded the personal narratives of an old trapper of the Southwest named George C. Yount.

One story which Clark recorded from Yount's life occurred in the 1820s when Yount was traveling with Ewing Young's trapping party in the Salt River system. Clark reported Yount as saying that when the party reached a fork of the main river, about eighty miles from its mouth (p. 11):

> our company divided, a part ascending one fork, and a part the other. The left fork heads due north, and the right fork north east. It was my lot to ascend the latter. It heads in the mountains covered with snow [White Mountains], near the head of the left hand fork of the San Francisco. . . . The other division found that their fork headed in snow covered mountains [San Francisco Mountains], as they supposed near the waters of Red River [Colorado River]. They also met a tribe of Indians, who called themselves Mokee. They found them no ways disposed to hostility . . . .

Clark's papers also include important information about Hopi's ancestral ties to the Grand Canyon. Unfortunately, however, the identity of Clark's informant is somewhat obscure, with Clark referring to him as simply "an old trapper" (p. 19). Possibly this old trapper is Yount, being around sixty years old at the time of his interviews with Clark (p. 5). It is certain, however, that either Yount or another trapper from the early nineteenth century visited the Hopis and discovered that, "No history at all exists of their nation, or of its origin, save a vague tradition that their forefathers came from the Big Canon of the Red River [the Grand Canyon of the Colorado River]" (p. 22).

Carle, Peggy

1941 *Burial Customs of the Indians of the Southwest.* Master's thesis, Department of Anthropology, Texas Technological College.

In this thesis, Carle depends heavily on the research of earlier anthropologists, especially Ernest and Pearle Beaglehole and Elsie Clews Parsons. She combines these earlier works into this one study, unfortunately adding little in terms of research or analysis.

Carle includes this important information about Hopi burial practices (p. 55):

> The grave is a hole deep and wide enough to receive the flexed body, which is put in a sitting position, facing toward the west. The hole is filled with sand and a stick is placed on the grave to serve as a ladder for the soul (breath-body) to depart to the next world, which place is supposed to be to the west.

Wherever that body goes in the west is not specified in this study. Other anthropologists have suggested that the breath-body's destination is the Grand Canyon (Page 1982:111,188).

Carle refers to the relationship between the travels of the deceased person and the coming of rain. She explains that Hopis bury their dead with, among other things, a vessel of water. That water, "is to be given to the Cloud that he may send rain" (p. 59).

Carothers, Steven

1994 Glen Canyon Dam EIS Perspective. In *Perspectives on the Glen Canyon Environmental Impact Draft Statement*, p. 17. Grand Canyon River Guides, Flagstaff, Arizona.

Carothers provides a personal perspective on more than twenty years of research in the Grand Canyon as a Grand Canyon River Guide and scientist. He notes that he and other river guides have "... witnessed first hand incredible changes the dam has brought to beaches (adios), riparian habitat (whoa, not too bad in this department), aquatic ecology (yikes), and archaeological sites and other signs of Hisotsinom passing."

Carr, Neita V.

1992 *Ethnographic Overview and Assessment of the Glen Canyon National Recreation Area and the Rainbow Bridge National Monument.* Prepared by the Department of Anthropology, Northern Arizona University, for the Department of the Interior, National Park Service. Ms. on file, Glen Canyon National Recreation Area.

This ethnographic overview was prepared by a graduate student at Northern Arizona University and is based primarily on a review of published literature. Carr conducted one "exploratory interview" or consultation with Leigh Jenkins, the Director of the Hopi Cultural Preservation Office (pp. 43, 48-50).

Carr's review of the literature indicates (1) there is evidence of "contemporary and historic Hopi resource usage due to their maintenance of strong associations and use of ancestral clan sites" (p. 14) and (2) that the Rainbow Bridge National Monument is an cultural site important to the Hopis (pp. 32-33).

Carr notes the Hopi Tribe thinks more ethnographic research is needed to document Hopi ties to and use of the Glen Canyon National Recreation Area and the Rainbow Bridge National Monument (pp. 48-49).

Casanova, Frank E.

1967 Trails to Supai in Cataract Canyon. *Plateau* 39(3):124-130.

Casanova reviews the documentary history pertaining to seven trails to the Havasupai with routes down Cataract Canyon. Casanova cites Emerick [1954, *The Havasupais, People of Cataract Canyon,* University of Pennsylvania Museum Bulletin 18(3)] to document that there are at least a dozen trails from the plateau to the Havasupai village, seven of which have been modified for horse trails.

Casanova provides the following information about the Moqui Trail to Havasupai, which is described as one the horse trails still in use (p. 124).

The first non-Indian to visit the Havasupai village was Padre Francisco Garcés, who arrived on June 20, 1776, via the Hualpai Trail (see Figure 1). Garcés documented that the Havasupai had cattle and horses that they had obtained from the Moqui (Hopi). When Garcés left Cataract Canyon he took the Moqui Trail which Casanova (p. 124) says, "... had been used for centuries as a trade route between Supai and the Hopi villages. This remains the main trail by which the Havasupais move their small herd of cattle from the never-failing springs in the depths of Cataract Canyon to their only available area of abundant feed above the rim."

In 1863, Jacob Hamblin took the Hualpai Trail out of Cataract Canyon, and then cut across the plateau to continue his journey on the Moqui Trail (pp. 126, 129).

In June of 1881, Lt. Col. Redwood Price was dispatched by General O. B. Wilcox, Commander of the Department of Arizona, to survey the Havasupai Reservation that had been established the previous year. Major Elliot Coues (the translator of the Garcés diary) accompanied this party as surgeon and naturalist. They descended the Kla-la-pa Trail, where they were met by the Chief of the Havasupai. Casanova (p. 127) says, "The next day they rode down the canyon 25 miles to Supai, passing on the right a side canyon up which was a plain trail leading to the Moquis. This was the trail by which Garcés had left."

A week after the Price expedition, Casanova (p. 127) says, "Lt. F. C. Cushing descended the Moqui Trail with Hopi guides."

Casanova provides additional historical information about the other trails to the Havasupai.

Comparison of Casanova's map (Figure 1) with USGS maps indicates the Moqui Trail comes into Cataract Canyon via Heather Wash. The Grand Canyon Village on the South Rim of the Grand Canyon National Park is approximately 20 miles due east of the Moqui Trail where it extends off Casanova's map.

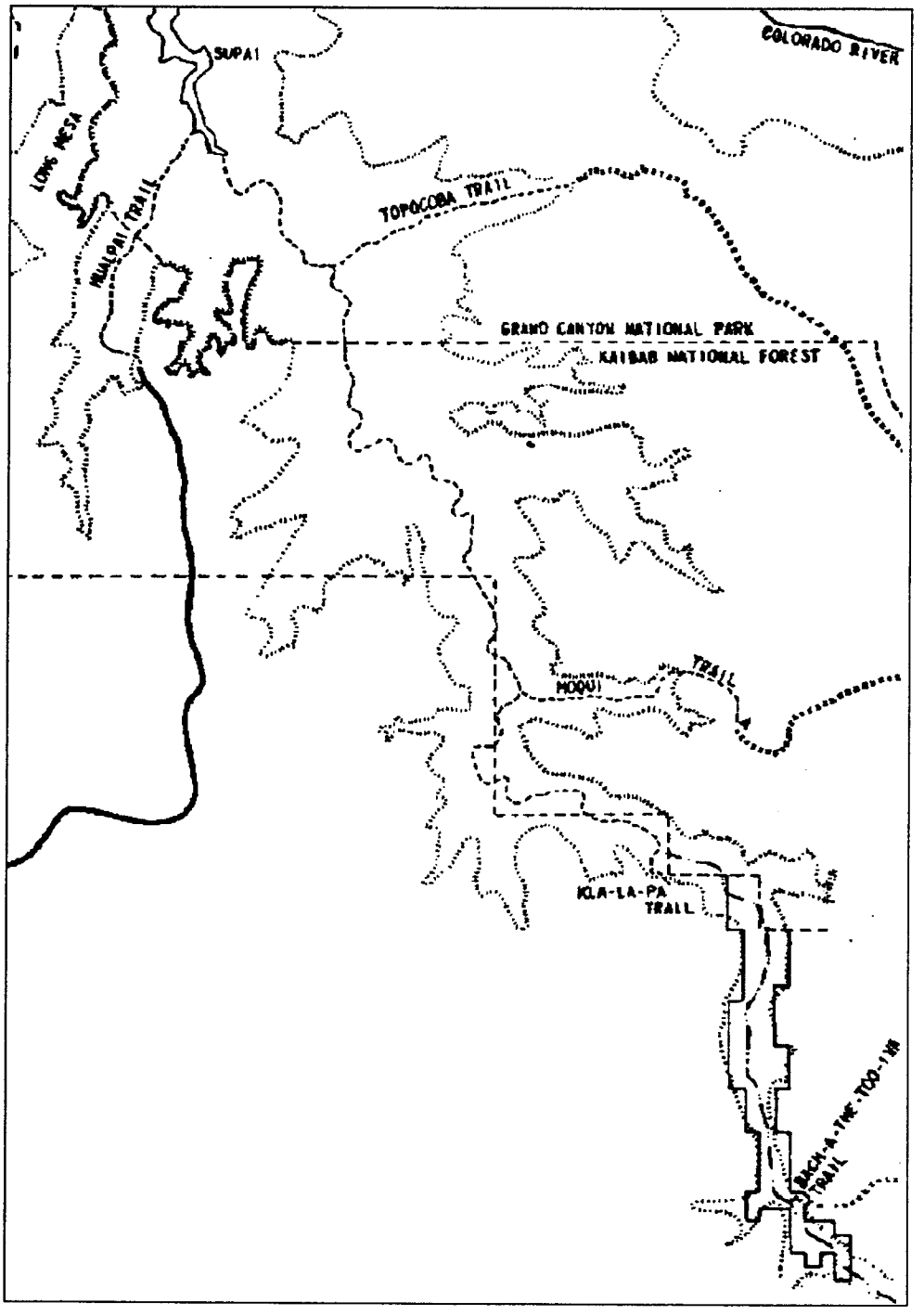


Figure 1 from Casanova (1967) "Trails to Supai in Cataract Canyon"

Clemmer, Richard O.

1993 "Hopi" in *An Investigation of AIRFA Concerns Relating to the Fruitland Coal Gas Development Area* by David M. Brugge, pp. 77-89. Office of Contract Archaeology, University of New Mexico.

Chapter 5 of this CRM report contains an abridgment of Clemmer's longer manuscript (presented as Appendix B), entitled, "A Brief Introduction to Hopi Culture, History, and Context."

Clemmer makes a number of interesting observations about Hopi stewardship and the land. He says (p. 79),

> "The Hopi concept of stewardship is summarized in the words *wuya,* "symbol or plan or tradition" and *nawis,* "must, irrespective of consequence, take some action;" and in the phrases, *tina:tyaw-yingwa,* "they guard, look after, take care of [it]" and *nawistota,* "they are willing to, obliged to ..." (Voegelin and Voegelin 1957:41, 42, 53). Belief in the necessity for stewardship and the actions that accomplish it are pervasive in Hopi life and extend to almost all facets of it. The objects of stewardship are collective, meaning they are linked to clan, matriline, village, sodality, ceremony, tradition, and to 'Hopiness' in general."

He adds (p. 79), "With regard to land in general, stewardship is regarded as a spiritual as well as a practical matter; land is generally worthy of protection, especially land within the Hopi Techqua." Clemmer (p. 80) observes the Hopi's relationship to the land is "multi-levelled." On the spiritual level is a general relationship "between the area where Hopis say they have left their marks ... and the interest or purpose of Hopi religion." This broadly includes all of North America. More specifically, Hopis claim a special relationship and responsibility for a more narrowly circumscribed area called "Hopi Techqua."

Clemmer (p. 80) notes, "The general relationship of land to the intent of Hopi religion is this: land is the object of prayers and intends to maintain its life-giving properties, that is, water, fertility, and renewability.

Clemmer (p. 80) states, "In Hopi belief, Massaw entrusted certain land to the Hopi as a 'shrine' to be used wisely for the perpetuation of life, and gave the Hopi instructions for the care of this land ... Hopi elders still speak of their land reverently and emotionally, some even referring to it as the Hopi's social security.'"

Clemmer (p. 82) identifies the Hopi-Tewa place of emergence to be Sibopay, "a brackish marsh near Great Sand Dunes, Colorado." Clemmer (pp. 82-84)draws upon the work of Fewkes, Yava, and Courlander to synthesize a brief overview of Hopi clan migration traditions that relate to the Hopi-Tewa.

With respect to Hopi religion, Clemmer (pp. 84) writes, "In Hopi belief, there are few if any unintended consequences or unintentional events or circumstances. There is neither serendipity nor coincidence ... The universe ... entwines humans in a pre-established fate and destiny." Once humans figure out their role in system of fate and destiny that is a part of a dynamic and changing universe, they can then take action.

Clemmer (p. 85) opines that,

> ... Hopi cosmology is partly reflected in the legendary migrations that occupied Hopi history, and in the resettlements they made and left that reflect the various Hopi *wuwutchim* (pluram of *Wuya*). Thus the ruins and rock writings identifiable with these wuwutchim are a kind of "road map" of the Hopi spiritual progress through the universe, at least in this world (and perhaps the previous world as well.), to the point where the Hopis "found their chief" and received instructions from Massaw on how to live and how to play their part in keeping the universe's energy forces in balance in the Hopi Techqua.

Clemmer (p. 86) observes, that "... the Hopis identify their ancestral dwelling places as much by symbols etched into rock and architectural ruins as by clan legends and traditions. In a sense, knowledgeable Hopis "read" an archaeological landscape with reference to the fundamental principles of their cosmological system."

Coder, Christopher

1994 Letter from Christopher Coder, National Park Service, to T. J. Ferguson. Ms. on file at Institute of the NorthAmerican West, Tucson, Arizona.

Coder's letter encloses six slides and seven black-and-white photographs of the Hopi Salt Mine in the Grand Canyon. These images were provided through the auspices of Jan Balsom, NPS Grand Canyon Park Archaeologist. Additional slides of the Hopi Salt Mine are on file in the cultural resources archive at the park.

The slides were taken by R. C. Euler on April 13, 1975 and document that there were hematite pictographs at the Salt Mine at that time. One slide shows a Hopi prayer feather hanging down from the salt deposit.

The black-and-white photographs were taken on December 7, 1990 during the 1990 NPS archaeological survey conducted for the GCES.

Collins, J. F.

1861 *Report of the Superintendent of Indian Affairs, New Mexico.* 37 Cong., 2 Sess., Sen. Ex. Doc. 1, Serial Set #1117, pp. 732-737.

Collins states in his report that Indian Agent John Ward went to Navajo country. He makes no reference to Ward's visiting the Hopis.

and by all the people especially the Spanish women to preserve the complexion. . . .

Colton's work advances the thesis that a well-established system of trade existed in the prehistoric and early historic Southwest, including a great deal of Hopi involvement. He mentioned that Hopis were one of the tribes that sent out trading expeditions to distant tribes (p. 312). He also states that Hopi pottery from 1300-1500 was found in the Verde Valley and the Tonto Basin (p. 317).

Colton, Harold S.
1946 Fools Names Like Fools Faces—. *Plateau* 19(1)1-8:

The name of this article derives from Colton's observation that there is a human propensity for people to mark their names in the places they visit, whether it be tourists at the Milan Cathedral or Kit Carson at Keams Canyon. Be this as it may, Colton thinks that the study of abundant rock art in the Southwest is challenging and "has failed to produce more than a few valid conclusions" (p. 1). This is because rock art is hard to date and difficult to place in a cultural context.

Colton suggests the Hopi site of Tutuveni near Willow Springs is one of the most important rock art sites in the Southwest, second only to the famous inscriptions on El Morro in New Mexico. Colton (p. 2) thought the petroglyphs at Tutuveni "are important because some of the Indian draftsmen who worked on them are still living, thus placing the interpretation on solid ground."

The petroglyphs at Tutuveni occur on large boulders of Mesozoic sandstone that have rolled to the bottom of talus slope at the edge of a mesa. Many of these boulders are covered on the top and sides with images. Colton (p.2) observes that some of the petroglyphs at Tutuveni are similar to those found near archaeological ruins, while others are quite different in subject matter and in the way the images are placed in rows.

He notes that the geologist G. K. Gilbert "discovered" the petroglyph site in 1878. Gilbert called the place "Oakley Springs." Colton quotes Garrick Mallery's 1886 article "Pictographs of the North American Indians (1st Annual BAE, p. 29), who reports on what Chief Tuba had to say about the significance of the rock art.

> Mokis make excursions to a locality in the canyon of the Colorado Chiquito to get salt. On their return they stop at Oakley Springs and each Indian makes a symbol on the rock. Each Indian draws his crest or totem, the symbol of his gens. He draws it once and only once each visit.
>
> There are probably some exceptions to this but the etchings show the general truth. There are many repetitions of the same design, from two to ten will often appear in a row. In several instances I saw the end drawing quite fresh while the others were not so. Much of the work appears to have been performed by pounding with a hard point, but a few of the pictures are scratched on. Many drawings are weather-worn beyond recognition, and others are so fresh that the dust left by the tool has not been washed away by the rain.

Colton notes that when he and his wife documented the site in 1931 they did not realize that Willow Springs and Oakley Spring were the same place (p. 3). In 1931 Edmund Nequatewa, their Hopi informant, gave the same explanation about the

petroglyphs as Chief Tuba did in 1878. Colton summarizes the information provided by Don Talayesva (Titiev 1937).

Colton says (p. 3-4),

> Hopis consider the trip to the salt mine a perilous adventure not only because the trail down in the Little Colorado Canyon in precarious—it is said that yucca ropes are needed to descend over certain ledges—but also because the Hopis believe that the Grand Canyon is the abode of spirits of the dead. Here the unseen spirits are believed to live in invisible pueblos and carry on their life like living Hopis in the world above. Naturally it takes a brave man to descend into this Indian Hades so it is no wonder that he wishes to make a personal record of the trip.
>
> The principle represented by pictographs is much the same as that which caused the pioneer to cut notches in his rifle butt, or the Indian to collect scalps: it is a means of satisfying one's vanity.

Nequatewa was able to identify many but not all of the clan symbols at Tutuveni (Figure 1). Colton states (p. 4),

> In one place, depending upon the skill of the artist, different forms of the same symbol appear. In other places different symbols stand for the same clan. This use of apparently unrelated symbols for the same group is explained in the clan legends which all Hopis know. As a example, the symbol for the cloud clan may be a cloud, a rainbow, lightning, a duck, a tadpole, a frog or any aquatic animal or bird; for the corn clan a corn plant is most common but a picture of the Germ God will do as well; the Kachina clan may be represented by a Kachina mask, but just as well by a branch of Douglas fir.

Nequatewa told Colton, as Talayesva later told Titiev, that a symbol repeated with same elements represented repeated visits by the same individual (p. 5). Nequatewa recognized the symbols for two clans that had recently become extinct at Hopi (i.e., the Moon and Oak Clans), suggesting to Colton that the other drawings he could not recognize were symbols of other extinct clans.

Colton (pp. 5-6) thinks rock art site similar to Tutuveni that also functioned as "registration book" occurs at Inscription Point, about eight miles northeast of Wupatki Pueblo. Unlike Tutuveni, however, the petroglyphs at Inscription Point do not occur in repeated rows.

Colton (pp. 6--8) notes that rock art is hard to date. He suggests that the rock art of different "tribes" can be distinguished by looking at the petroglyphs that occur on the frontiers of different cultures. Colton illustrates rock art elements from the Kayenta, Sinagua, and Cohonina areas as an example. Colton (p. 8) concludes by stating,

To try and draw general conclusions on rock drawings in northern Arizona is still dangerous at the present time. We can say with confidence only that rock art drawings have been made for three general purposes, as "doodles", as fetishes, and as signatures of travelers so perhaps the old adage is not always true, that "He is a fool and ever shall , who writes his name upon a wall."

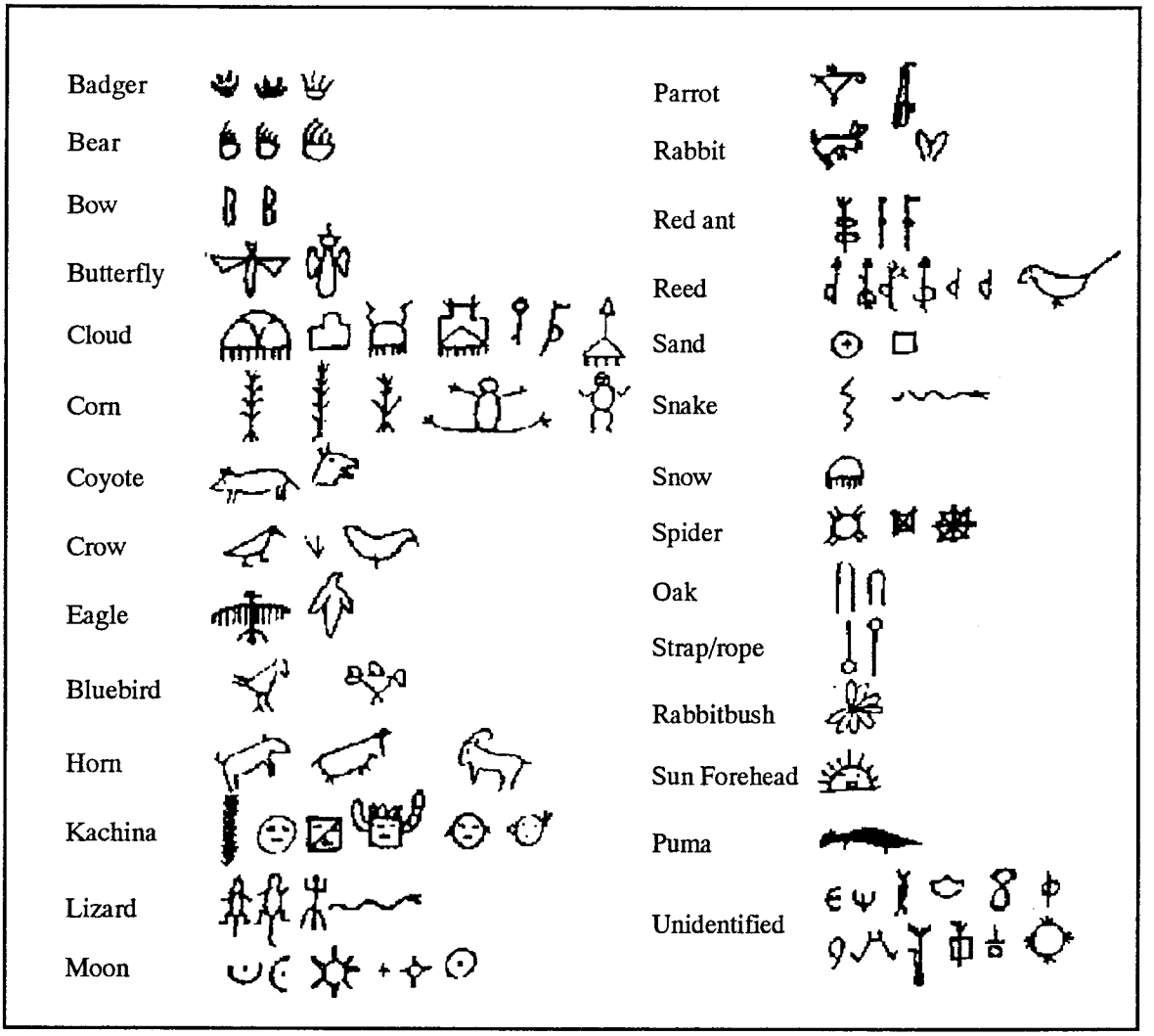


Figure 1. Clan symbols at Tutuveni recognized by Edmund Nequatewa in 1937 (adopted from Colton 1946:4).

Colton, Harold S.

1946 "Fools Names Like Fools Faces--." *Plateau* 19:1-8.

In this article, Colton discusses the general phenomena of humans inscribing words and pictures on rocks. He posits that for many people, all over the world, this is a very meaningful act. Rock inscriptions mark the presence of humans in a place at some point in the past or even, repeatedly, through the present.

One of the most important inscription rocks in the southwestern region of the United States, Colton claims, is the Hopi clan rocks near Willow Springs. At Tutuveni (the Hopi name for this place) Hopis who are pilgrimaging through the Little Colorado River Valley for salt leave a mark of their efforts. Indeed, Hopi men have been performing this salt expedition for a long time and Tutuveni provides the evidence.

Colton describes the rocks and their history, stating that (pp. 2-3):

> Here many large boulders of Mesozoic sandstone have broken from a cliff and have rolled down a talus slope into a little valley. These boulders are covered, top and sides, with rock drawings called "petroglyphs" pecked or incised in the rock. Some of the petroglyphs are similar to those associated with the ruined pueblos and cliff dwellings of the region, but others are quite different. They differ not only in subject matter but also in the way they are placed on the rock: the same subject, be it corn plant, a frog or a bow, is frequently repeated and they are usually placed in rows.
>
> These rocks were discovered in 1878 by the geologist, G. K. Gilbert, who called the place Oakley Springs, and the significance of them was explained to him by Hopi Chief Tuba of Oraibi, who is reported to have said, "Mokis make excursions to a locality in the canyon of the Colorado Chiquito to get salt. On their return they stop at Oakley Springs and each Indian makes a symbol on the rock. Each Indian draws his crest or totem, the symbol of his gens [clan]. He draws it once and only once at each visit" (Gilbert as presented in Garrick Mallery's, *Pictographs of the North American Indians.* 1st Annual Report, B.A.E., 1886.)

Colton and his wife also conducted an interview with a Hopi, Edmund Nequatewa, about these same rock inscriptions in 1931. Their informant gave a similar explanation of the rock inscriptions and their meaning (Mary Russell and Harold S. Colton, "Petroglyphs, the Record of a Great Adventure," *Am. Anthrop.* 33:32-37). Mischa Titiev also published a study on the salt expedition, including the practice of carving one's clan symbol on the face of these rocks (Titiev, "A Hopi Salt Expedition," *Am. Anthrop.* 39:245).

Colton adds some important information about the salt pilgrimage in this article, explaining that (p. 3):

> Hopis consider the trip to the salt mine a perilous adventure not only because the trail down into the Little Colorado Canyon is precarious--it is said that yucca ropes are needed to descend over certain ledges--but also because the Hopis believe that the Grand Canyon is the abode of the spirits of the dead. Here the unseen spirits are believed to live in invisible pueblos and carry on their daily life like living Hopis in the world above.

Colton concludes that because "it takes a brave man to descend into this Indian Hades . . . it is no wonder that he wishes to make a personal record of his trip" (p. 3).

Colton, Harold S.
1947 Hopi Dieties. *Plateau* 20(1):10-16.

Colton briefly describes Hopi deities and their role in Hopi culture. He notes (p. 10) that,

> In the mind of the Hopi there is a distinction between the dieties [sic] and the spirits. The spirits of men, animals and plants are the kachinas which are often impersonated. The spirits of some of the dieties appear as kachinas and are impersonated but most of the dieties are never impersonated or even represented by images. The Hopi recognize about thirty-six dieties. These grade from four major gods through minor gods to folk heroes.

The deities described by Colton include Sotuqnangu (God of the Sky), Masao (Earth God), Kwanitaqa (One-Horned God), Alosaka (Germ, Two-Horned God), Huruing Wu-uti (Goddess of Hard Substances), Tawa (Sun God), My-yao (Moon God), Taiowa, Kokyang Wu-uti (Spider Woman), Po-gang-hoya and Palo-ngao-hoya (Twin War Gods), Kochoi-laf Tiyo (Poker Boy), Pi-tsingsivos Tiyo (Cotton-seed Boy), Pivitamni (Patches), Ong Wu-uti (Salt Woman), Tikuoi Wu-uti (Outcast Woman), Talao-tumsi (Goddess of Love), Tiponi, Patusun-ala, Tawavo-gang (Servant of the Sun), Yaponcha (Wind God and Dust Devil), Kwi-nyao (God of the North Wind), Tea-mahiye (Snake Chief of the Underworld), Awahiye (Assistant Chief of the Underworld Snake Fraternity), Katoya, Ponochona (South Star), Hachokata (God of Gamblers), Chimonmana (Jimson Weed Maiden), Pasommana (Spiderwort Maiden), Somaikoli, Kakikoli (Fire Chief), Siwikoli, and Palolokon (Plumed Serpent or Water Serpent).

The following observations are made about deities associated with the Grand Canyon. Regarding Massau, "the Earth God," Colton writes (p. 10-11),

> Masao is the God of the earth, both of the surface and the underground. In his capacity as ruler of the surface of the earth, in ancient days, he allotted the Hopis their lands. As ruler of the underworld he is the god of death.
>
> He is visualized by the Hopi as an ugly young man, very terrifying. He is supposed to mingle with the people and does not hold himself aloof like Sotuqnangu. He takes many forms and is sometimes impersonated in the fall, spring, and summer ceremonies.
>
> The impersonator wears no mask, and his face is painted with blood. His body paint is ashes, his belt a yucca string, his kilt a woman's old dress. He is barefooted but wears yucca strings about both legs. In his hands he carries an old coiled plaque and an old digging stick.

Regarding Kwanitaqa, the "One-Horned God," Colton writes (p. 11),

> Kwanitaqa guards the gate to the Hopi underworld, where the departed spirits go, and directs the souls on two paths, one for righteous people and one for evil people. he can do this because he knows peoples' thoughts. He is a kind go and helped the Hopi come from the underworld.
>
> The impersonator wears a headdress with a single horn turned back. There is a white line around the edge of his chin. His only body paint is a white

line in front of his arms and legs. He wears a wildcat skin or a white wedding robe. He is bare-footed and carries a bell or wand.

Regarding Alosaka or Muniwu, the "Germ, or Two-Horned God," Colton writes (p. 11),

> Alosaka, the god of reproduction, of man, animals and plants plays a very important part in Hopi religion. He is thought of as gentle and kind and holds himself aloof. His home is the underworld.
>
> He is impersonated at the time of Wuwuchim in November. The headdress of the impersonator carries two horns that curve back. His hair hangs down his back. Whereas Kwanitaqa, the one-horned god, has a white line under his left eye, the only body paint of Alosaka is a white line down the front of his arms and legs. For a costume he wears a tanned buckskin. He wears moccasins and has turtle shells on his legs. In his hands he carries deer horns and a wand.

Regarding Kokyang Wu-uti, or "Spider Woman," Colton writes (p. 12),

> The Hopi conception of the Spider Woman is hard to understand. She is one person and also many persons, and thus is everywhere. The Hopi respect and love her, for she is gentle and kind and will help people in trouble, and can take revenge on evil gods. She is thought of as a vigorous old woman and is never impersonated, but the Hopi are said to have shrines to her at every village.

Regarding Po-gang-hoya and Palo-ngao-hoya, the "Two Little War Gods," Colton writes (p. 12-13),

> Twin gods, grandsons of the Spider Woman, mingle with the people and play tricks on them, but if the people are in trouble, they appeal to their wise grandmother who shows them how to outwit evil.
>
> They are sometimes impersonated and the people who take part in the ceremonies keep images of them in their houses. They are not associated with any particular ceremony, but may appear in several, nor are they impersonated by members of any particular society or clan, but by anyone who is selected.
>
> Both war gods are depicted as young boys, but yet as warriors. Po-hang-hoya wears a skull cap with feathers. His face is painted black with two vertical white lines, warrior symbols on his cheeks, and with white around the mouth and eyes; body paint, Supai red paint with two white spots on each arm, two on the chest and two on each leg. He wears a black breech clout. He usually carries a quiver of arrows, a bow and a lightning device.
>
> Palo-ngao-hoya has a bunch of feathers for a headdress. His face is painted reddish brown with two black vertical lines, warrior symbols on each cheek. His body is painted reddish brown, and he wears an old style black breech clout. About each leg he wears a hank of yarn, and a couple of anklets. He carries a bow, arrows, and a bull roarer.

Regarding Ong Wu-uti, "Salt Woman," Colton writes (p. 13),

The Salt Woman is thought of by the Hopi as an elderly woman living at the salt lake, 40 miles south of Zuni. She has the power to predict seasons. She is a good goddess and provides the people with salt. The salt goddess is never impersonated and plays no part in any ceremony.

Regarding Patusun-ala, Colton writes (p. 14),

These are four gods of the cardinal points an are impersonated in the Soyal Ceremony in initiation years. Their headdress carries five horns and squash blossom ears. The face paint differs with the points of the compass, yellow for the god of the north, blue for the god of the west, red for the god of the south, and white for the god of the east. The body paint is bluish gray sediment from the bottom of springs. These gods are believed to live in the north. They do not mingle with people, are rather feared, are powerful, but not oppressive.

Colton, Harold S.
1949 *Hopi Kachina Dolls.* University of New Mexico Press.

Citing Fewkes (1903:Pl. LXII), Colton lists the Pakiowik or Fish Kachina as item 223, describint it as an "Old mask at First Mesa."

Colton, Harold S.

1964 Principle Hopi Trails. *Plateau* 36:91-94.

The function of Colton's article is to extract a portrait of the trail network from the Hopi Mesas into other portions of the Colorado River region and beyond. He basis his reconstruction on documentation recorded by non-Indians who traveled the region between 1540 and the late nineteenth century. Colton demonstrates clearly that trails connected Hopis to many peoples and places in the historic period.

Based on his evidence, Colton claims that there were two trails leading from the Hopi Mesas to the Havasupai villages within Cataract Canyon of the Grand Canyon (pp. 91-92). There was a trail leading to the Verde River Valley and one which crossed the Little Colorado River near Winslow and continued on its way to the White Mountain Apaches (p. 92). There are also trails documented which led from the Hopi Mesas to Zuni, Fort Defiance, the Ute territory, and the San Francisco Peaks (pp. 92-94).

Colton, Harold S.
1964 Principal Hopi Trails. *Plateau* 36:91-94.

The purpose of Colton's article is to describe eight major segments of the trail network from the Hopi Mesas to other portions of the Colorado River region. He bases his reconstruction on documentation recorded by non-Indians who traveled the region between 1540 and the late nineteenth century. Colton demonstrates that trails connected the Hopis to many other peoples and places in the historic period.

Colton describes that two trails leading from the Hopi Mesas to the Havasupai villages within Cataract Canyon of the Grand Canyon (pp. 91-92). One of these trails left the Hopi Mesas near Hotevilla, crossed the Dennebito Valley, Howell Mesa, and the Moenkopi Wash and then went to the Hopi gardens at Moenkopi. This trail continued to Moenave, and then to the southwest around the east flank of Shadow Mountain to the head of the Hopi Trail Canyon. The trail then went down the canyon to the Little Colorado River. Colton notes that a landslide a few centuries ago blocked the channel of the river just below where the Hopi Trail Canyon joins the Little Colorado River. While most of the rock has been washed away, the trail is still a hard rock crossing. On the west side of the river, the trail switchbacked up the canyon wall and headed west through the Coconino Basin to Supai. This trail thus runs about a distance of 150 miles. Colton thinks this is the trail followed by Father Garces in 1776.

A second trail to the Supai followed the Dennebito Valley and crossed the Little Colorado opposite Black Point (p. 92). It then switchbacked up the talus slope of Black Point to the mesa top. Colton says there is a Hopi shrine at this point. The trail then heads westerly, climbing up the monocline to the juniper forest. The trail then heads northwesterly, passing the Moqui Tanks to a point several miles above the spring that feeds Cataract Creek. The trail then goes down the canyon to Supai. This trail traverses a distance of about 140 miles. Colton thinks this is the trail followed by Cushing during his trip to the Havasupai in 1881.

There was also a trail leading to the Verde River Valley and one which crossed the Little Colorado River near Winslow and continued on its way to the White Mountain Apaches (p. 92). Other trails are documented leading from the Hopi Mesas to Zuni Pueblo, Fort Defiance, the Ute territory, and the San Francisco Peaks (pp. 92-94).

Colton, Harold S.

1960 *Black Sand, Prehistory in Northern Arizona.* University of New Mexico Press, Albuquerque.

In Chapter 10 of this book (pp. 77-83), Colton repeats information about the Hopi clan marks at Tutuvehni that was published in Colton and Colton (1931) and Colton (1946). No new information is presented.

In Chapter 11 (pp. 85-91), Colton reviews information about commerce in ancient times. Much of this information is drawn from Colton (1941).

There is documentary evidence from the period 1680-1691 concerning Hopi trade in a greasy red paint to pueblos along the Rio Grande (pp. 85-87). This paint was used by Spanish ladies in Santa Fe as rouge. Don Diego de Vargas was instructed by the viceroy to find the source of this pigment so an assay could be conducted to determine if this pigment was cinnabar, which was used in to extract the mercury needed in silver refinement. De Vargas learned this paint was procured by the Hopis from a cave west of their pueblo that required a journey of four days. De Vargas did not find the mine but he did obtain a burro load at Oraibi and this was sent to Mexico City where it was assayed and found to be iron ore (hematite) and not cinnabar.

Colton adds, "For the past three hundred years the Hopi have been buying this red paint from the Havasupai Indians, who live in a tributary of the Grand Canyon, four days by trail west of the Oraibi. The Hopi buy it at $5 per pound and peddle it to other Indians at 25 cents a teaspoonful, thus making a tidy profit."

Colton notes the Havasupai closely guard the location of their hematite cave from outsiders (p. 86).

Colton (p. 86) also describes trade in deer skins and agricultural produces between the Havasupai and Hopi.

Colton, Mary-Russell Ferrell

1965 *Hopi Dyes*. Museum of Northern Arizona Press, Flagstaff.

Colton notes that "rock salt" from Zuni Salt Lake and the Grand Canyon is a common mordant used in Hopi dyes (p. 14). "A mordant is a chemical used to precipitate the active principal of the dye in the fiber. The mordant is said to fix or set the color and make the dye insoluble in water or water with neutral soaps."

Colton Collection

n.d. The Man Who Followed his Wife to the Home of the Dead ("Skeleton House" in the Bottom of the Grand Canyon near Salt Mine). Ms. 207-113-5, Colton Collection, Museum of Northern Arizona.

This is a brief translation of a Hopi narrative about a man who follows his dead wife's spirit to the place of the dead in the Grand Canyon. A wren helps the grieving man get down into the canyon where he finds that the people there eat the steam of food rather than the food because they did not have heavy bodies. When the people go on a deer hunt and call out they have taken a deer, the living man only sees a dead cricket or other little dead bug. Eventually the man meets the Old Spider Woman who takes pity on him (p. 2). "She told him that it was no use his trying to live with his wife down here, that her body had passed into a different phase of existence, she was gone and separated from him forever and the dead and the living cannot dwell together." She calls upon two large owls to help transport the man out of the canyon, where the man went home. However, the man did not live long after returning to his village and thus returned to Skeleton House to live with his wife.

In an addendum to this account, several observations are made about the Hopi beliefs about death, including: "When a person is ill and unconscious, the Hopis say that he has left his body and gone down into the place of the dead, the "Skeleton House," which is in the bottom of the Grand Canyon at the junction with the Little Colorado, where the old salt mine is (p. 2)."

It is also noted (p. 4) that night is day for the people who live in Skeleton House and that they must always return there when they go abroad.

Coues, Elliot (Translator)

1900 *On the Trail of a Spanish Pioneer, The Diary and Itinerary of Francisco Garcés (Missionary Priest) in His Travels through Sonora, Arizona, and California, 1775-1776.* Francis P. Harper, New York.

Garcés was a Catholic priest who visited the Grand Canyon and Hopi Mesas in 1776 [see annotation for Garces, Francisco, 1965, A Record of Travels in Arizona and California, 1775-1776, Fr. Francisco Garces, translated and edited by John Galvin. John Howell Books, San Francisco for notes on the substantive information about Garcés journey to Hopi from another translation of the work.]

A valuable aspect of Coues' translation is his extensive annotation concerning the route Garcés traveled. For instance, on pp. 346-347, Coues notes that Garces lost his compass in California and that as a result neither his distances nor courses are very accurate for that part of his journey in Arizona. His measurement of the distance from the Havasupais to the Hopis converts to 107 miles when in fact it was at least 112 miles or more.

Coues (p. 349) notes the trail from the Havasupai to Moqui in the area south of the Grand Canyon passes north of Red Butte.

Coues (p. 350) suggests the Hopi-Havasupai Trail was the route the Hopis used to take Cárdenas to the Grand Canyon in 1540. Coues also notes that the requisite data to really determine where the Spaniards saw the Grand Canyon in 1540 does not exist and that "in their absence, conjecture has been rife."

According to Coues (p. 393) the etymology of the word Moki is:

> MOKI, Spanish form, *Moqui*, evidently derived from the Zuñi name *A'-mu-kwe*, an opprobrious epithet, although *moki* in the Moki language signifies "dead." Their own name in Hópituh-shínumuh ("peaceful people"), abbreviated to Hopituh and Hopi, the last form now being generally applied to the people by ethnologists.

Courlander, Harold

1971 *The Fourth World of the Hopis.* New York: Crown Publishers.

This book contains some information related to the Grand Canyon, the collection of salt, and other items pertinent to GCES. The Hopi origin into the fourth world is summarized, including the role of the Twin War Gods and Spider Grandmother (pp. 17-33).

The creation of salt is described (p. 26).

> Pokanghoya and Polongahoya looked around at the vast Upper World. Pokanghoya said, 'Everything has a sameness. Something needs to be done.' Polongahoya answered, 'Yes, see how it is out there. The ground is soft. It is nothing but mud. ' So they took their buckskin ball and their playing sticks and began to play nahoydadatsia, following the ball wherever it went, running all the time. Wherever their feet touched the soft earth it became hard. They gathered the mud into great mounds and turned them into mountains. Whenever they passed, grass and trees came into being ... and near where the Zunis now live they created salt beds, and they also made salt beds at other places. When at last they had done enough things of this kind, they returned to the sipapuni.

In the Hopi story of "The Lalakon Dance at Shungopovi" (pp. 111-117) the Twin War Gods attended a dance at Shungopovi, but because they were dirty, the people in the village treated them rudely. They returned to Spider Grandmother, where they were fed. The story continues, relating that,

> After he had finished eating, Pokanghoya said, 'Those people are not generous. They do not treat travelers well. They do not deserve everything that we have done for them. The salt beds we made for them are too close. The people take their salt for granted, they think the salt made itself. But it was the two of us who went out, while the people were still at the sipapuni, and created the salt in different places ... Those people who live in Koechaptevla and Awatovi, they have not offended us, and they can continue to get their salt at that place, where the Zunis live. But as for the people of the western villages who get their salt north of Moencopi, they are not going to be able to find it there anymore. Hereafter when they go for salt they will have to travel through hard country. They will meet Utes, Paiutes, and Navajos on the way, and when they have found their salt they may have to fight to keep it from their enemies. This is the way it will be from this time on.
>
> Spider Grandmother said, 'Where are you going to put the salt.

Courlander, Harold

1982 *Hopi Voices, Recollections, Traditions, and Narratives of the Hopi Indians.* University of New Mexico, Albuquerque.

Courlander (p. xxiii) notes that some Hopi narratives are the property of particular clans and societies and are restricted from telling to people outside those groups. There is therefore a reluctance to give stories to outsiders, particularly if they concern ceremonial and religious matters (p. xxv).

With respect to history, Courlander (p. xxiv) observes,

> While many stories are of the entertainment variety, some of them are ingredients of clan chronicles or doctrines, and though they contain what we usually define as myth or legend, they are seen as history. And because this "history" is not written, but preserved orally through stories, songs, and ritual dramas, great attention must be paid to their accuracy. Therefore, clan (or kiva society) authority is of great importance. A responsible person will not chance mutilating facts. And if he is knowledgeable, he will tend toward literalness in story narration. He will be attentive to what kind of a tree grew in a certain place, or to what direction a man took in departing from a village, or to what kind of a prayer feather was made, not because that detail is meaningful to the outcome of the narrative, but because that is the way the story was told to him, the way it really happened.

Courlander (pp. xxv-xxxvi)identifies major themes in Hopi narratives, including flight from evil; hard work in a hard land; running racing, and gambling; transformations from man to animal and animal to man; animals as messengers or agents; journeys to distant lands; the number four; and miniature magic.

Homer Cooyama explains (pp. 97-98) explains that Hopi children are not told the "real story" of origins until they are initiated in the kiva societies. The children's story and the men's stories are therefore not the same. Cooyama notes that the emergence accounts recorded by Voth were not the true, secret stories of the religion. In some places Voth is "altogether wrong."

Pautiwa (Ned Zeena) from Walpi narrates an account of "The Land of the Dead" (pp. 100-105). He notes the Oraibis claim this as their story. The place where the dead ones go is called Maski. "That word *mas* means dead. It's the town of the dead" (p. 101). Pautiwa (p. 101) explains,

> According to those Oraibis, you go west when you die to the Grand Canyon, over where the Oraibis go for their salt. Somewhere around there. They claim the sipapuni is there too, the place where we Hopis all came out of the underworld. around there somewhere is the road to Maski. That's

where the dead spirits go. And they have all kinds of punishments for the bad ones.

Pautiwa narrates an account of a boy from Oraibi who went to visit Maski. At the end of the account, after the boy is returned to the land of the living, Pautiwa says "He told his father everything he'd seen, and that no one was ever supposed to try and go there [to Maski] while he was still living. That place was only for the dead spirits.

Crampton, C. Gregory

1988 *Ghosts of Glen Canyon, History beneath Lake Powell.* Publishers Place, St. George, Utah.

In a section on Indian Trails, Crampton notes that the Anasazi inhabitants of the area constructed trail systems running from uplands to the canyon bottoms to gain access to lithic sources in the river bed (p. 34). In some places cross-canyon trails were developed. These trails were common in the lower reaches of Glen Canyon in the area now covered by Wahweap Bay and Rock Creek Bay.

Crampon notes (p. 34, "Not having iron tools, the Indians laboriously pecked out foothold steps often over breathtakingly steep surfaces. The smooth cup-like steps were not more than four inches wide and two inches deep, the minimum required to keep one from falling." He adds that some Anasazi trails were reused in the historic period by Paiutes and Navajos who sometimes improved them using metal tools.

With reference to Moqui Canyon, Crampton (p. 84) suggests that the Hopi word Moqui, meaning dead, was often used to "... describe almost anything that looked like it had been made by prehistoric man. Thus in Glen Canyon there were Moqui ruins."

Moqui Bar was a rich gold mining sand and gravel bar possibly named for the prehistoric "Moqui steps" which provided overland access.

"Fort Moqui" is described as Glen Canyon's first tourist attraction (pp. 98-99). This was a prehistoric two story masonry building built near what became the settlement of Hite. This archaeological site was described by the expeditions of Powell and Stanton.

> Pokanghoya replied, 'We are going to place it near where the people emerged from the Lower World. To reach it the people will have to pass by the sipapuni. Then perhaps they will remember where they came from and what was given to them in the Upper World..
>
> Spider Grandmother said, 'Very well, I will go with you on the journey.'

After passing Moenavi, the two brothers went north to where they had created a salt bed in ancient times (p. 115). They scooped up all the salt and put it into a small bag that Polongahoya carried in his belt. They traveled on and made a trail westward. When they stopped to rest, the two brothers marked a totolospi pattern on the rocks and played this game. They said, "Hereafter, when anyone comes this way he will stop here and play totolospi with us. If he loses the game to us he cannot have any salt and will have to return back."

They continued on and after awhile the Spider Grandmother grew tired (p. 115). Pokanghoya said, "Yes, if that is how it is, we will make a place for you to rest."

> The brothers then scooped a trench out of the solid rock. They told Spider Grandmother to remove all her clothes and to lie in the trench they had made. When she was lying on her back, Pokanghoya squirted medicine on her and turned her into stone, with her vulva plainly visible.
>
> Pokanghoya said, 'Whenever men come this way for salt they must copulate with Grandmother, and on their return journey they must bring her gifts. This will remind them that nothing in this world is without obligation.

The brothers went on to another place where Pokanghoya took the bag of salt from Polongahoya (p. 115). The younger brother remained here and Pokanghoya spayed him with medicine to turn him to stone. This was done to remind the Hopis who created the salt. Pokanghoya continued the journey into the "great western canyon." "At a certain place where the descent was difficult he created giant steps in the rocks" that led to the Little Colorado River. He passed a cave where Masauwu sometimes lived. He passed the Sipapu which "was just as Gogyeng Sowuhti had left it, covered in with water so it resembled a pond" (p. 116).

> He went on. He passed the place where the Colorado and the Little Colorado meet. There he went deep into the gorge, and he went around touching the rocks and canyon walls with his hands. Everything he touched turned to salt. He emptied the salt bag they had brought from the old salt bed north of Moenavi, spreading its contents on all sides. Then Pokanghoya ascended partway up the canyon wall, where he turned himself back into rock.

> In time, some of the men of Shungopavi and Oraibi and other western villages went to the old place looking for salt. But they found that the salt was gone from there, except just a little that the brothers had spilled on the ground ... They discovered a trail going west, and on that trail they found some stone footprints left by Pokanghoya and Polongahoya ...

They followed these footprints and came upon all of the places the two brothers had established along the trail (p. 116-177). At last they discovered the new salt deposit created by Pokanghoya. After returning to their villages, the men discussed the meaning of everything they had seen. From that time on, whenever men went along the salt trail they stopped at the spots where the two brothers had stopped and placed pahos there. They had intercourse with Gogyeng Sowuhti going into the canyon and brought her a present of salt on their return.

> It is said that the salt deposit in the canyon was the last of the great creations of Pokanghoya and Polongahoya. It is also said that although the figures of the brothers and Spider Grandmother are there in stone, the three of them really returned to their home on the mesa and went on living.

Courlander (p. 214) notes that the Walpi and other First Mesa people do not agree that the sipapuni is in the Grand Canyon, asserting that its location is no longer known. The salt myth he gives is not part of the First Mesa belief. "Walpi customarily sent its salt expeditions to Zuni in the southeast.

Crane, Leo

1925 *Indians of the Enchanted Desert.* Little, Brown, and Company, Boston.

This book was written by the Indian Agent at Hopi in 1911 when the Secretary of War dispatched Colonel Hugh G. Scott and a detachment of cavalry troops to quell Hopi "hostilities" about sending children to school. According to Crane, Scott proceeded from Keams Canyon to Hotevilla where he spent ten days talking with Youkeoma about the origins of the Hopi and other matters. Crane (p. 162) wryly observes, "It was the seventh day, and Youkeoma, in the recital of his traditions, had reached a date only four hundred years removed." An abridged account of this origin narrative furnished to Crane as a rough transcript by the troop surgeon is presented on pp. 163-167.

Curtis, Edward S.
1922 *The North American Indian*, Vol. 12. The Plimpton Press, Norwood, MA.

This book is a rare and out-of-print publication not generally available in most libraries. The oversized book contains a lengthy ethnographic summary of the Hopi Indians, accompanied by artful photographs taken by Curtis. Curtis draws upon and summarizes much of the anthropological literature about Hopi available at the time the book was written. He adds to this additional oral history and ethnographic observations he personally made during his field work to take photographs at Hopi. The Museum of Northern Arizona does not allow its copy of Curtis' book to be photocopied because it is too valuable and fragile. Since a file copy of the relevant parts of the book could not be obtained, extensive notes and quotations relevant to the GCES are provided in lieu of a brief annotation.

Notes:

On History and Oral History

p. 16, "So much for recorded history. It remains to detail the steps by which various migrant groups in centuries past gradually assembled in Tusayan. Mostly the information to be had on this subject is legendary, but the latest of these movements are known also from documentary evidence. How much of fact lies in these clan legends, who can say? The present writer would not be understood as taking the ground that all of the patently unmythical parts is historical truth. On the other hand, he does not reject them *in toto*. He believes that the roots of these legends are embedded in the truth, that they actually indicate the directions from which various groups of people started in a series of wanderings that finally brought them together in the Hopi country."

Clan Migration History

p. 16, at Tokonavi on the Colorado River lived Cougar and Dove people, and these were joined by the Horn people from a region still further north. The son of the Cougar chief returned from down river with a Rattlesnake girl who founded the Rattlesnake clan, which eventually became predominant. The Rattlesnake and Horn people departed and went to Wupatki on the Little Colorado River, where they found Squash and Flute people.

The Horn people separated from these other clans, and turned back northward to establish themselves at Moencopi.

Later the Little Colorado River pueblos were abandoned by the others, who traveled to Oraibi Wash, where they separated. The Squash people founded successively Mûnáy-ovi ("porcupine high-place") near present Oraibi, and Chukubi ("pointed place") a mile northeast of Shipaulovi at Middle Mesa. The Flute people, after leaving the Little Colorado River, settled at Lengyaobi ("flute high-place") about 30 miles northeast of Walpi, where they were joined by Horn people from Moencopi Wash. Before the Spaniards arrived, the consolidated Horn and Flute people had left Lengyaobi and settled at Kwastapabi ("spring place") about 2 miles northeast of Wípho spring and six miles northeast of Walpi. Here they remained for an extended period.

p. 17, Meanwhile, the Rattlesnake people, who had left the Little Colorado River in company with the Squash and the Flute people, established themselves in the valley midway between East and Middle mesas. Their next movement was towards Kuchaptuvela ("ashy slope") on the northwestern slope of East Mesa.

Cushing, Frank Hamilton

1923 "Origin Myth from Oraibi," *The Journal of American Folk-lore,* vol. 36, pp. 163-170.

This text, published posthumously in 1923, was actually recorded during Cushing's visit to Oraibi in 1883. It summarizes briefly the Hopi's Origin myth, beginning not with creation, but with life in the first world. Cushing describes this place as a dark and crowded cave where people complained and felt unhappy (pp. 163-64). To help the people find a better place to live, "The Two"--presumably, the Twin War Gods--descended into that cave world and planted a variety of plants, "hoping that one of them would grow up to the opening through which they had descended, yet have the strength to bear the weight of men and the beings (p. 164)." The efforts of "The Two" eventually paid off; Cushing writes:

> At last, after many many trials, the cane (arundinaria) was found so tall that its top grew through and so strong that men could climb on it to the top. It was jointed that it might be like a ladder readily ascended, and ever since then the cane has grown in joints as we see it today along the Colorado [River].

In this way, the people passed from the first cave into the second and then, again, on to the third world. Each level was as dark and crowded as the first had been. Such conditions "caused men to long for light (p. 165)." Cushing explains that the darkness in the third world led the people:

> to seek again deliverance. They ascended to the fourth world which was this world. But when they came out, they found it as dark as it had been below, for the earth was closed in by the sky, as had been the cave worlds by their roofs. Men went abroad and did their doings only by the light of torches and fires.

Finally, the people and other creatures consulted together and decided that they needed light. Consequently, they created the sun and the moon. With the sun's light, the people could now see around them and they realized that (p. 166):

> the world was indeed very small and surrounded on every side by waters . . . . The people appealed to Vulture who spread his wings and fanned the waters, that they flowed away to the east and west until mountains began to appear. Across these 'The Two' cut channels through which the waters rushed away, wearing their courses deeper and deeper, thus forming the great canyons and valleys of the world.

This imagery of flowing water and deep canyons is significant to the Hopi Emergence myth; these elements suggest the Grand Canyon of the Colorado River as the possible location of this event.

Within a short time in the fourth world, the people learned that this place of emergence was also where they would return when they died. A witch who was proving to some angry people that although she had killed a priest's daughter, this young girl was happy in the world below. The witch urged the people, "to return to the hole whence they had all come and look down, promising that she would willingly die should they, after looking, still wish to destroy her (p. 167)." The people found the priest's daughter happy and at play in this netherworld. The witch explained

> "Thus shall it be with the children of men."--"When we die then," said the people to one another, "we are to return to the world whence we have come out . . . ."

Cushing, Frank Hamilton

1965 *The Nation of the Willows.* Northland Press, Flagstaff, Arizona [original 1882.]

This book reprints two articles published by Cushing in the *Atlantic Monthly* in 1882. Although written for a popular audience, Cushing's articles were the first ethnographic description of the Havasupai, or "Kuhni". Cushing made his journey in June of 1881. Of interest to the GCES is Cushing's description of the Moqui Trail (see Casanova 1967, Trails to Supai in Cataract Canyon), and his comments on the trade between the Hopis and Havasupai.

Cushing, accompanied by a Zuni friend and a Cheyenne assistant, traveled from Zuni to Hopi, crossing the Puerco River and traveling by the Hopi Buttes. At Hopi, Cushing he visited First Mesa and obtained a Hopi guide named Pu-lá-ka-kai (p. 23). Cushing notes the Hopis tried to persuade him to wait until the "autumnal rains" before making the trip since water was scarce along the trail. Cushing persisted in going, however, "... and with the blessings and prayers of the high priest, said while giving me his parting embrace, and with every facility which Moqui generosity could give or Moqui ingenuity could contrive, — water-bottles, goat-skins, pi-ké, and he-pa-lo-kia-oé, — we set out."

The trail Cushing followed from First Mesa ran by Oraibi, where Cushing observed a Navajo Dance. From there, Cushing (p. 24) says, "... we headed west-ward, over rolling, sandy stretches of country, turning at last southward, and following a well beaten trail into the Dieserto Pintado, which borders the Colorado Chiquito." They camped at the Colorado Chiquito [Little Colorado River], which was their last known water source for several days.

The next day, Cushing (p. 26) says, "The trail, well beaten, led over plains and little glades, which merging into side valleys, ended in the great gray malpais terrace, over which the stoniest, most difficult trail at last brought me to the long but abrupt ascent of the border of the Kuhni Desert, the eastern edge of the Great Colorado Plateau." In his usual flamboyant style, Cushing (pp. 26-28) describes traveling through the "Kuhni Desert," a tortuous journey of over sixty miles without water. From Cushing's description of "piñon-clad hills," the "pine regions," and the "grand parks," it is clear he traveled through what is now the Kaibab National Forest south of rim of the Grand Canyon."

Eventually Cushing's (p. 30) party came to "aing-shi-ki-ana," Bear Spring, located "a day's distance ... from the entrance to the Kuhni cañon." There was a little water at this spring, and they camped there two nights, hunting and recuperating before proceeding down the side canyon which led into Cataract Canyon and the village of the Havasupai.

In his ethnographic overview of the Havasupai, Cushing (p. 43) states, "Separated by the terrible waterless wastes I have the described, the Moquis and the Zuñis have nevertheless been their constant visitors for generations."

The date of Cushing's journey is fixed by his reference to a visit six or seven days earlier by an expedition from the Sixth Cavalry led by Colonel Price (p. 45).

Cushing describes the red ochre used for body decoration by the Havasupai (p. 53). He also inexplicably talks about an absence of salt in their food preparation (p. 55).

With respect to trade with Hopi, Cushing states (p. 56) "Earthen pots and brass kettles, procured by barter with the Moquis, serve as cooking vessels. Moqui bowls and native baskets are used in serving food ..."

Cushing (p. 59) observed a Hopi woman living with the Havasupai. He notes men outnumbered women and there was thus some intermarriage with other tribes.

The Havasupai were described as agriculturists in the summer and hunters in the winter. Cushing (p. 63) says the are,

> ... justly famous for the quantity, fineness, and quality of their buckskins, which are smooth, soft, white as snow, yet thick and durable. These buckskins, manufactured into bags, pouches, coats, and leggins, or as raw material, are valued by other Indian tribes, even as far east as the Rio Grande ... All of this material is bartered with the Pueblos for blankets and various products of civilization, the former being again traded to the Hua-la-pai for red and black paints, undressed buckskins, and mountain-lion robes. Their red paint, ochre of the finest quality, has ... celebrity among Indian tribes ...

Davis, Dan E.

1956 Memorandum to Chief Ranger, Grand Canyon National Park, from Supervisory Park Ranger Davis on subject of "Reconnaissance of Salt Trail Canyon, Little Colorado, Beamer Trail, and Tanner Trail on October 3-6, 1956. Ms. in "Hopi Salt Trail Paraphernalia" file at Museum of Northern Arizona Library.

This memorandum by a National Park Service Ranger reports on a reconnaissance of the Salt Trail and other trails in the vicinity of the Little Colorado and Colorado Rivers.

A party of three rangers hiked down the Salt Trail Canyon to the Colorado River. Davis notes the trail head at Salt Trail Canyon was marked by two large cairns (p. 1). It took almost seven hours of "hard walking" to hike down to the Little Colorado River. Davis reports there is little trace of a trail in the first section of Salt Trail Canyon that crosses a jumble of boulders and scree. After the Supai formation was reached, the trail followed a bench on the east side of the canyon. Davis notes there were cairns every few feet marking the route and observes "... it could hardly be called a trail but is the easiest way down." A crossover to the west side, made at the top of the Redwall, was not well-marked with cairns. Davis reports there were pot holes that would hold water after a rain at this location.

The rangers camped at the Little Colorado River and then hiked to the Colorado River the next day (p. 1-2). This hike entailed crossing the Little Colorado River four times. Davis reports there was no sign of a trail and no cairns were observed along the stream. The rangers put up Park boundary and "Closed Area" signs just inside the Park boundary on the south side of the Little Colorado River. A "Government Property" sign was put up at the Beamer Cabin "to deter vandalism." The rangers camped on a island gravel bar at the confluence of the Little Colorado and Colorado Rivers.

The third day the rangers hiked the trail built by Tanner, presumably in the 1880s for prospecting. Davis states (pp. 2-3), "Several vague references have been found concerning the use of what is now the Tanner Trail by the Havasupai to get to the salt deposits of the Hopi so this could be an old Supai trail." Davis calls this the Beamer Trail, as Ben Beamers old cabin is at the northern terminus of the trail along the Little Colorado River. The rangers hiked out the Tanner Trail, noting that Supai horses might be able to use the trail but not NPS mules.

In summarizing the archaeological aspects of the reconnaissance, Davis states (p. 3)

> As there has been, and is some controversy concerning the route to and the location of the Hopi salt mine, every effort was made to tie in the various landmarks with the narratives of the salt trek. While many of the places mentioned in the account of Don Talayesva's trek in 1912 were missed, the general description fits this route and some shrines and places were definitely identified and there is no doubt in my mind that this is the same route taken by Talayesva.

The shrines or general shrine locations Davis identified included images of the War Twins just below the trailhead, Spreading Buttocks, home of the dear of the Reed Clan, Stitching Seam carved by War Twins, Home of the Chickens, Nose Scraping Place, cave of Nukpana, Home of the Koyemshi (p. 3). In addition, two shrines not mentioned by Talayesva were observed, "... consisting of piles of fist size pieces of jasper about 2-3 feet high." Along the Little Colorado, Davis located "Blue Salt" and "Going Down Salt" on the north side of the stream about 1.5 miles below the mouth of Salt Trail Canyon. Davis also located the "Original Sipapu." The rangers did not visit the Hopi Salt Mine but Davis accurately describes its general location.

A road log is attached to the memorandum describing how to get to Salt Trail Canyon from the Cedar Ridge Trading Post.

Davis, William M.

1926 Biographical Memoir: Grove Karl Gilbert. *National Academy of Sciences Memoirs,* vol. 21, no. 5. Government Printing Office, Washington, DC.

Geologist Grove Karl Gilbert came to the Colorado River country in 1878 under the auspices of the newly-created United States Geological Survey to lead a topographical study of the plateaus north and south of the Grand Canyon. Gilbert spent the year doing research in an area ranging from Salt Lake City down to the San Francisco Mountains. According to his biographer, William M. Davis, Gilbert's research "led to no published report" (p. 113).

(A resourceful Garrick Mallery writing for the American Bureau of Ethnology, however, was able to obtain information from Gilbert about his research, leading to important documentation of information about Hopi salt pilgrimages to the Grand Canyon. See Mallery (1886)--On the Pictographs of the North American Indians, *Fourth Annual Report, Bureau of American Ethnology.*)

Davis, W. W. H.

1857 *El Gringo; or, New Mexico and Her People.* Harper & Brothers, New York.

W. W. H. Davis' book about places and peoples of New Mexico included a fairly lengthy discussion of the Hopis, describing their economic patterns, appearance, and village names. Yet, he felt limited in what he was able to report about the Hopi, for, as he put it, "not having visited that country," his information was incomplete (p. 115). Most probably Davis got his information about the Hopi from Henry Schoolcraft's tome concerning the United States Indians. His was one of the earliest collections of ethnographic data on Native peoples in the country and a well-known source. Another nineteenth-century author, Colonel R. B. Marcy, chose to quote Schoolcraft's work, only a few years later, to compensate for his own lack of knowledge about the Hopi while compiling his book on life in the frontier West (Marcy 1866--*Thirty Years of Army Life on the Border*: 104-111). Probably, Davis submitted to the same authority.

Davis had accompanied Governor Meriwether as a United States Attorney in 1855 into Navajo country for the purpose of making "treaties with the various Indian tribes of the Territory," but he had not gone as far as Hopiland (p. 389).

Day, A. Grove

1940 *Coronado's Quest: Discovery of the South-Western States.* Los Angeles: University of California.

Day's book puts the adventures of the Coronado Expedition into a readable and comprehensive format. Much of the information comes from the Castaneda chronicles, as this is the only extant testimony of the entire expedition. Yet, Day also includes supplementary information from other primary documents and secondary sources.

Chapter Six discusses the experiences of Tovar and Cardenas among the Hopi. Day makes some interesting observations in this chapter but he also posits some unfounded claims. For instance, Day states that "The men who offered to get salt," on the return voyage of the Cardenas expedition from the rim of the Grand Canyon, "had to be suspended over the edge by ropes to reach the clusters (p. 144)." There is no direct evidence to substantiate this claim; Day has merely assumed that the salt mine which the Spaniards visited, was the one Hopis utilized in this manner.

But, on the other hand, Day makes some very insightful observations. One of the more intriguing examples is Day's remark that (p. 145):

> Both the Tovar and Cardenas parties journeyed through the desert plateau of northern Arizona that today is the chief range of the nomadic Navajo, now the largest tribe in North America; but neither party reported the existence of any inhabitants in this country except the people of Tusayan. If any Navajos lived then in the territory that they were later to make their own, they were merely a few prowling newcomers who kept out of sight of the Spanish invaders.

Day, Joseph R.
1990 Letter to the Editor, *The Sun*, September 7, 1990, p. 6.

This letter to the editor of the Flagstaff newspaper criticizes Ekkehart Malotki's attempt to publish a book about the Hopi salt trail. In part, Day states,

> Malotki's contention that he re-discovered the trail and that ... "The Hopis haven't cared about this trail. All those journeys to the mines came to an end in 1909," ... is laughable. I personally know of at least four trips made by Hopis during the last 20 years including trips made by villagers from Shungopavi, who, according to Malotki, have never used the trail.
>
> In addition, the first Anglo to discover the trail and related sites was not Malotki but Vernon Taylor of Prescott College, who, rather than publish his findings for personal gain, chose instead to work with the Hopi people and the National Park Service during the 1960s to protect these sites.

Joseph R. Day's letter indicates he resides at Shungopavi Village. Day is an Anglo trader married to a Hopi woman.

DeSauss, Raymond

1956 Remains of the California Condor in Arizona Caves. *Plautea* 29(2):44-45.

This brief article reports on findings of Condor bones in four caves in the Grand Canyon. All of these caves are located in the Redwall limestone. Split-twig figurines were also found in three of the four caves, although not in direct association with the Condor bones. DeSauss concludes (p. 45) that the presence of Condor bones "... in figurine sites may be fortuitous or there may be some connection, such as ceremonial use of the feathers."

Dockstader, Frederick J.

1985 *The Kachina and the White Man: The Influences of White Culture on the Hopi Kachina Religion,* rev. ed. University of New Mexico Press, Albuquerque.

In this survey of Hopi-White relations, Dockstader includes a summary of contacts between non-Indians and the Hopi at the end of his work. Much of his information is unsupported (providing no references anywhere in the text for a variety of the supposed, nineteenth-century encounters), but the list is useful for researching more extensively into Hopi history.

Donaldson, Thomas

1893 *Moqui Pueblo Indians of Arizona and Pueblo Indians of New Mexico.* Extra Census Bulletin, 11th Census. United States Census Printing Office, Washington, DC.

This nineteenth-century report has provided a great deal of information to anthropologists and historians researching the history of Hopi-American relations. In some cases of contact which Donaldson cites, there seems to be no other references which document the encounter. For this reason, his work is indispensable.

But for the documentation of Hopi ties to the Grand Canyon, Donaldson's work offers no information.

Dongoske, Kurt

1994 Hopi Tribe. In *Perspectives on the Glen Canyon Environmental Impact Draft Statement*, p. 28. Grand Canyon River Guides, Flagstaff, Arizona.

Dongoske briefly describes his involvement the Glen Canyon Dam Environmental Impact Statement in his capacity as Tribal Archaeologist for the Hopi Tribe. Prior to beginning work on the project, Dongoske only knew about the Grand Canyon from two visits as a tourist. With the assistance of Steven Carothers, Dongoske quickly learned about the GCES issues pertaining to natural and cultural resources, economic concerns, and politics. Dongoske reflects on the GCES EIS process by saying,

> During the past three years, I have witnessed some remarkable changes in the form of precedents set and the development, albeit at times with much hair pulling, teeth gnashing, and tempers flaring, of a cooperative relationship between five federal agencies, one state agency, and five sovereign Indian governments. One of the most important precedent-setting outcomes of this process is the involvement of the Native American community. The Native American Tribes have been the main vocal and driving force behind the direction that this EIS has taken. A new era is emerging in the management of federal lands in which Tribes will be active and vocal participants in the decision making process regarding the management of traditional resources. Truly, we have seen the demise of the federal myopic managerial paradigm.

Dorsey, George A.

1903 *Indians of the Southwest.* Passenger Department, Atchison, Topeka & Santa Fe Railroad.

This is an introduction to the Southwest written for a popular audience. With respect to Hopi beliefs about death, Dorsey (p. 128) writes that "... on the fourth day after death, the soul departs from the body, mounts the soul of the long cotton string, or "road marker," and travels on it toward the west; for it indicates the way to Maski, the Skeleton House, at the bottom of the Grand Canyon."

Drouin, Katherine

1994 Hopis Guard their Secrets. *Arizona Daily Sun,* July 3, 1994, pp. 1, 16.

This newspaper account begins with the statement that "For centuries, members of the Hopi Tribe have made a pilgrimage along the salt trail, a route they follow to gather salt for practical and sacred purposes. The trail winds through the Navajo and Hopi reservations, leading ultimately to Grand Canyon. Rituals associated with following the trail are deeply imbedded in Hopi culture and religion. But the Hopis want to make sure that only proper members of their tribe know the secrets."

The article reports that the Hopi Tribe has recently refused permission for students to visit the reservation to study Hopi religious practices and has opposed Northern Arizona University's proposed master's program in Native American religion. NAU put the development of this program on hold. NAU President Clara Lovett is quoted as saying the university needs to be sensitive to tribal concerns.

Willis Regier of the University of Nebraska Press says he put maintaining good relations with the Hopi Tribe above First Amendment rights when deciding not to publish Ekkehart Malotki's manuscript on Hopi ritual pilgrimages (p. 16). This manuscript is described as containing photos of shrines found along the pilgrimages and maps of the trails.

Leigh Jenkins of the Hopi Cultural Preservation Office is quoted as saying (p. 16), "Part of the overall concern of the Hopi Tribe was that it put Hopi religious practices into a very visible environment."

Jenkins is also quoted as saying (p. 16), "We value our religious privacy. It is not conserved for the sake of tourism or curiosity. People should respect that. They should not intrude on the religious privacy of Hopi people.

Eggan, Fred

1967 From History to Myth: A Hopi Example. In *Studies in Southwestern Ethnolinguistics*, edited by Dell Hymes, pp. 33-53. Mouton, The Hague.

Eggan investigates the relation between Hopi history and tradition by analyzing several accounts of a nineteenth century Navajo attack on Hopis returning from Fort Defiance. By comparing the Hopi accounts of this event recorded in Stephen's *Hopi Journal* (1936) and Nequatewa's *Truth of a Hopi* (1936) with independent historical documentation, and considering the motivational factors of different types of Hopi oratory, Eggan is able to differentiate the historical elements of the accounts from mythological motifs added as the narratives became oral tradition. Eggan finds that Hopi oral accounts contain accurate history within certain parameters. As he states (p. 51-52),

> In this larger context we can see some of the reasons for the coalescence of these separate events and their condensation into myth form. But we can also see from this example that it may be possible to reverse the process -- to unravel the traditions and myths and isolate the historical events embedded in them from the motivational and other patterns that have been added. This will tell us a good deal about Hopi history and character, and help us understand the changes they have undergone ...
>
> One example does not allow us to generalize very far, but it does demonstrate that it will be profitable to reanalyze Hopi mythology for its historical content, as well for other purposes. The critical cases will ... be those traditions for which we have no possibility of discovering independent accounts and which don't fall into type situations ... These will be handled in terms of other objective criteria ... Time perspective will have to come from archeology and from comparative studies, since the Hopi are relatively unconcerned with absolute time. We can now handle changes in social structure with greater sophistication than did Fewkes and Mindeleff and thus correct their analyses and interpretations ...

Eggan's paper was written in response to the beliefs of an earlier generation of anthropologists, such as Robert H. Lowie who is quoted (p. 33) as stating, "I cannot attach to oral traditions any historical value under any conditions whatsoever." Eggan points out that we now have more data and better historical controls than were available to the earlier anthropologists, and posits that we should be able to undertake a more sophisticated handling of social and cultural data to develop a means to segregate history from myth.

Understanding the role and cultural function of myths and mythmaking is one step in developing the methodology that is needed. In contrast to oral accounts intended to convey religious and moral teachings, Eggan notes that Hopi accounts of observed events are "remarkably accurate and detailed," in part because Hopis returning from a journey are traditionally expected to give their kiva and village a minute account of everything they saw and did.

Eggan (p. 52) notes that the Hopi have a different world view from ours and a different conception of human nature. He posits that we should try to understand history in Hopi terms as well as those of the "objective world" (i.e., the world view of non-Indian scholars).

Eggan's methodological suggestions are very useful in understanding the oral accounts of of Hopi migrations relating to the Grand Canyon.

Eggan, Fred

1994 The Hopi Indians, with Special Reference to Their Cosmology or World View. In *Kachinas in the Pueblo World*, edited by Polly Schaafsma. University of New Mexico Press, Albuquerque.

This brief article presents an elegant anthropological perspective on Hopi cosmology. Eggan makes a number of observations pertinent to the Grand Canyon.

Eggan (p. 7-8) notes that Hopi cosmology emphasizes the earth rather than the heavens and begins with the emergence of the Hopi people into the Grand Canyon by way of the *sipapu*. Eggan (p. 9) agrees with Matthews (1902) that the Hopi origin account constitutes a "myth of gestation and birth."

Eggan describes a Hopi account of the creation of the physical world "... in which the Sky God created a beautiful virgin who caused so much rivalry among the other deities that he transformed her into the earth world, her hair becoming the vegetation, her eyes the springs, her secretions the salt, and so on, and he assigned separate regions and powers to the various deities." Masau was assigned to preside over the surface of the earth, the dead, and the underworld.

Eggan explains (p. 10),

> The Hopi dead, whose "breath" bodies journey from the grave to the afterworld in the Grand Canyon, are met by sentinels from the Kwan society, who are associated with Masau, and either allowed to proceed or punished in the fire pits for non-Hopi behavior until they are purified. In the villages of the dead they continue Hopi life, existing on the odor of "steam" of food offerings and responding to the prayer offering of the living. Daily they ascend tot he San Francisco peaks as Katsinas, and as clouds they provide rain to those Hopis with good hearts who are following the Hopi way of life.

He adds (p. 10), "The equation of the dead with clouds and rain, by means of the concept of katsinas, provides a system in which the dead maintain their interest in the living and continue to help their relatives by sending rain."

In discussing Hopi clan migrations, Eggan (p. 11) notes that Hopi ancestors settled in the Grand Canyon and among other locations. He suggests the Pueblo population in the Grand Canyon left that location in the early twelfth century due to climatic change and moved towards the Hopi Mesas. Eggan briefly describes the Hopi clan traditions relating to priority of settlement and ritual on the Hopi Mesas, as well as the grouping of clans into phratries based on conceptual or historical similarities. Eggan specifically notes that after it was established, Oraibi received an influx of people from the Moenkopi area and the Grand Canyon.

Eggan provides a brief description of the Hopi ceremonial system and calendar (pp. 12-13). He suggests early Hopi ceremonial activities focused on hunting and gathering and the cure of illness through medicine men or shamans. After the Hopi ancestors became agriculturists, fertility rituals were added to the ceremonial system and ceremonies to bring rain became important.

Eggan (pp. 13-14) notes that Hopis secure rain and good crops by prayer and offerings. Pahos and other ceremonial gifts are offered on altars, at shrines, in springs, and in fields to secure the aid of the katsinas. He adds (p. 11)

> The Hopi make pilgrimages, usually annually, to clan shrines, eagle shrines, ancestral ruins, salt sources, places associated with the katsinas, and places still kept secret. The Hopi have a large number of shrines ... some associated with the emergence of the Hopi from the underworld in the Grand Canyon, some derived from the experiences of the various clans in their wanderings, some at earlier sites where they lived for a period, and others in and around their present villages, or in neighboring mountains and springs associated with katsinas.

Eggan says (p. 11),

> The most important shrines or sacred areas are in the Grand Canyon where the Little Colorado River flows into the Colorado. Here the *sipapu*, or place of emergence, is physically present in a large raised pond. Here is their "source," the place of emergence from, and entrance to, the underworld. Here the deceased Hopi live and respond to the prayers of their descendants. In this area are the salt deposits that are periodically visited to gather salt, essential to their diet, with shrines to the Spider Woman, who created the salt, and the Twin War Gods, who are her grandchildren and the protectors of the Hopi and their domain. Here too, are many of their early villages in which their world view was shaped, and which are still shrines to their descendants. Only Hopis initiated into Wuwutsim, the Tribal Initiation, could journey to this area, since the trip was physically difficult and involved danger since the spirits of the dead lived in this region and Masau, the God of Death, had his major home in the cliffs.

Eggan (p. 14) observes that

> Archaeological sites, representing the former homes of particular clans, are sacred areas that are visited periodically to make offerings to ancestors, with requests for aid in growing crops. Nearby ruins are visited in connection with particular ceremonies to notify the deceased relatives buried there that the ceremony is in progress and the dead should do their part."

The Hopis have a complex belief system about life after death (p. 15). When a child dies, its "breath spirit" does not go to the underworld but to the household of its mother where it is reborn in the mother's next child. Eggan says (p. 15),

> The Wuwutsim initiates go to the general underworld and to the homes of the katsinas in the San Francisco Peaks or the spring at Kisiwu. Deceased Kwan members have a special home at Kwanivi, a small mountain near the Grand Canyon, while Ahl members go to a lake in the San Francisco Peaks known as Alosaka, and the Singers have a home at Dowanasavi, the center of the earth with a shrine south of Oraibi.

With respect to springs, Eggan (p. 15) points out that "Springs are sacred, being inhabited by water serpents who are mythical creatures quite separate from the ordinary snakes."

In discussing Hopi land, Eggan (p. 15) says,

> The exterior boundaries of the Hopi domain are likewise marked by a series of shrines that the Hopi elders now revisit every year. There are eight major shrines, marked in part by spirals or concentric petroglyphs and buried prayer offerings at locations of importance to the Hopi. In general the eight shrines mark the last staging areas in the final migrations to the Hopi homeland.

Eggan observes (p. 15) that "Hopi religion is central to their life and for centuries has involved their land."

Eiseman, Fred B.
1961 Discovery of the Hopi Salt Cave. *Spout* (November):2-7.

This condensed version of Eisman's 1959 *Plateau* article was published in the Morton Salt Company's coporate magazine. It includes a introduction that says,

> Permission for use was obtained by Edwin Sequaptewa who works at Saltair plant, and who is a Hopi Indian. He is familiar with the trek across the Painted Desert to the Grand Canyon salt caves where men are lowered with ropes into the caves. The stalactites and stalagmites of salt found here are sometimes strung on cords and worn as necklaces in Hopi ceremonies, according to Mr. Sequaptewa.

Ellis, Florence H.

1961 The Hopi, Their History and Lands. Defendent's Exhibit E-500, Docket 229, Indian Claims Commission.

This testimony was prepared for submission to the Indian Claims Commission by an expert witness for the United States. The testimony, based entirely on a review of the published literature, does a credible job of reporting what was known about Hopi land use by anthropologists at the time it was prepared. A typescript of this testimony was published by the Garland Press in 1974 in a volume titled *Hopi Indians*.

Ellis (pp. 170-171) describes Hopi salt gathering at the Salt Mines in the Grand Canyon and at Zuni Salt Lake, citing publications by Titiev (1937), Stephens (1936:994), Beaglehole (1937), and Eiseman (1959). Ellis (pp. 179-181) describes the major shrines visited on the Salt Pilgrimage to the Grand Canyon, citing publications by Titiev (1937) and Colton (1946).

A list of 84 Hopi shrines is presented on pp. 182 to 187, based on Appendix 5 of Stephen's Journal and Fewkes (1906). This list includes a spring to the east of Cataract Canyon where the Hopi obtain yellow pigment, clay, and reeds; and the Sipapu near the Colorado River (Pisisvaiyu), near the salt deposits and bubbling spring where yellow ochre is obtained.

Elston, Catherine
Hopis Contribute to Grand Canyon Water Study. *Hopi Tutu-veh-ni* Volume 11, Number 76, October 16, page 2.

This brief article in the Hopi tribal newspaper reports that the Hopi Tribe is a cooperating agency in the Glen Canyon Environmental Studies. Chairman Vernon Masayesva told the Cooperating Agencies at a meeting in Phoenix that multicultural values need to be emphasized when assessing damage to the Colorado River and the Grand Canyon. Masayesva is quoted as saying,

> Hopis have a belief that you can't keep taking away from the earth. In return for the benefits received, you must always give something back. If we all accept this philosophy, our world will be a much better place.
>
> Grand Canyon is a good place to start. It is the place of Hopi origin; it is also our destiny.

Dave Wegner, the scientific coordinator for GCES in Flagstaff, was quoted as saying,

> I have worked very hard to get many different groups and agencies involved in this project. I pushed hard to make sure the tribes were involved.
>
> Scientists and the tribes want the complete facts about impacts known. We do not want to make recommendations to Congress and have things put aside. We are compiling facts and truths and we will not allow these facts to be ignored.

Euler, Robert C.

1965 Foreword. In *The Nation of the Willows* by Frank H. Cushing. Northland Press, Flagstaff, Arizona.

This foreword introduces the reprint of two articles published by Cushing in *Atlantic Monthly* in 1882 that report his journey to visit the Havasupai in Cataract Canyon. In his foreword, Euler describes the route Cushing took from Zuni through the Hopi Mesas to Havasupai.

On p. 3, Euler states, "When Cushing rode out from Zuni on his Havasupai journey, accompanied by a Zuni Indian guide and an acculturated Cheyenne Indian assistant, he traveled a well-marked trail. For centuries there had been a lively trade between Zuni and Hopi and with the Havasupai. The buckskins and red paint of the canyon Indians were exchanged for pottery, turquoise, and other goods of the Pueblos. The Hopi also served as middlemen for European metal and woven objects that they traded to the Havasupai even before the first white man actually set foot in their village."

Euler (pp. 4-5) describes the trail from Zuni to Hopi as leading from the Zuni River into Arizona in a northwesterly direction. It then went down the Rio Puerco of the West, around the Hopi Buttes, past Awatovi, to the south of Walpi, and on to Oraibi. From Oraibi the trail went westerly down Blue Canyon to Moenkopi and then to Cameron on the Little Colorado River. From there the trail followed portions of the route that later became the state highway into the east entrance of the Grand Canyon National Park. The trail then headed across the Coconino Basin, which Cushing termed the "Kuhni desert." Euler notes that although Cushing claimed to be the first non-Indian to travel on this part of the trail, the route had been previously used by Garcés in 1776 and by John D. Lee in 1873.

Although Euler does not name it as such, the route from Cameron to Havasupai is known as the Moqui Trail (see Casanova 1967, Trails to Supai in Cataract Canyon).

Euler (p. 5) continues the description by stating, "From the Coconino Basin, the trail led down Little Jim Canyon, past a cave which had long been occupied by Havasupai hunting parties, and then out onto the great grassy Cataract Plain, eventually reaching Havasupai, or Cataract Canyon at Topocoba Hilltop." From there, Cushing traveled down Cataract Creek to the village of the Havasupai.

Euler (p. 6) notes that the stone cliff dwellings and storerooms Cushing observed along the trail into Cataract Canyon were built by prehistoric people unrelated to the Havasupai.

According to Euler, (p. 6), the Havasupai obtained salt from two sources: "mines on the Colorado River below the mouth of the Little Colorado and near the mouth of the Virgin River ..."

Euler, Robert C.

1988 Aspects of Hopi Land Use and Occupancy. Ms. on file at Hopi Cultural Preservation Office, The Hopi Tribe, Kykotsmovi, Arizona.

This report describes aspects of Hopi use outside the 1882 Hopi Reservation in the early twentieth century. It provides a "brief archaeological and ethnohistorical resume" of Hopi occupation of this area (p. 2).

Euler (p. 5) notes that, "Archaeologists who have worked in the area occupied prehistorically by the pueblo peoples known as the Kayenta Anasazi, or 'Hisatsinom' as they are known by the Hopi, firmly believe that these Indians were directly ancestral to the Hopi of today. No Indians in this country have a longer authenticated history than the Hopis." By AD 1000 the ancestors of the Hopis had a territory that extended from the Grand Canyon on the west to Canyon DeChelly on the east, and from the San Juan River on the north to the Little Colorado and Puerco Rivers on the south.

Euler (p. 6) states that archaeological evidence shows prehistoric Hopi use of the entire area called "Tusqua." He states (p. 6), "The traditional Hopi area of Tusqua has been described by Hopis in several sources over the past fifty-five years." [In support of this statement, Euler cites Petition from Hopi to Commissioner of Indian Affairs, April 8, 1930; Application and Brief to President Roosevelt from attorney Harry Beardsley, et al. dated January 5, 1934, Minutes of Meeting at Polacca, December 4, 1939, part of Rachford to Collier, April 2, 1940; James 1974:100-105, and Page 1982.]

The Hopis had "friendly trading relations" with neighboring tribes, particularly with the Havasupai to the west and Zuni to the east (pp. 6-7). Garces and Escalante report the Havasupais had an encampment at Moenkopi in 1776, and Euler adds that the Havasupai they may have been farming with the Hopi's permission (p. 8).

Euler (pp. 40-41) describes a model of Hopi land use in the early twentieth century that entails a core settlement area surrounded by a much larger sustaining area. The core was where the Hopis maintained their permanent villages, as well as engaged in agriculture, hunting, and gathering of plant resources. The sustaining area was used as a "resource bank" providing scarce plant, animal and mineral resources specific to particular locations. The sustaining area also offered an array of lands and resources that could be used during crop failures, droughts, and other stressful environmental conditions.

Euler (p. 50) notes Hopi salt pilgrimages to the Grand Canyon "... were not merely routine hikes; important religious shrines along the route were visited." After discussing Hopi use of Zuni Salt Lake, Euler describes the salt pilgrimages to the Grand Canyon (pp. 50-51),

> A more difficult journey was to the Grand Canyon salt deposits. From Moenkopi, the Hopi walked to Tutuveni, near Willow Springs, where they carved their clan symbols on the rocks. From here, past several shrines the

exact locations of which are not known to outsiders, they reached the head of Salt Trail Canyon, a tributary of the Little Colorado River. Several shrines were visited along this stretch of the route. Reaching the Little Colorado, the party stopped at the Sipapu, a travertine spring from which Hopis believe they emerged from the mythological underworld. This very sacred place and other shrines on the route are all within the 1934 area. From the Sipapu the Hopi salt gatherers proceeded to the confluence and then down the mainstream of the Colorado in the depths of the Grand Canyon to the salt deposit ...

Euler, Robert C. and Henry F. Dobyns
1971 *The Hopi People*. Indian Tribal Series, Phoenix.

This brief, well-researched book reviews Hopi history and ethnography for a general audience. It provides a good summary of the published literature.

Euler and Dobyns suggest that Cardenas' trip of twenty days from Hopi to the Grand Canyon may have been an exaggeration of Castañeda (p. 28).

Euler and Dobyns comment on the Hopi's role in the regional trading network that existed in the eighteenth century. They say (p. 32),

> Adept Hopi traders converted Spanish manufactured goods into profitable items of trade to other Indians not directly in contact with the Spaniards. Meeting the westernmost Northeastern Pai Indians for the first time in mid-1776, for example, Friar Francisco Garces noted that they wore leather belts of Spanish style with metal buckles obtained form the Hopis. By trading manufactured goods westward, the Hopis could insure the continued supply of the wild food products they relished, such as dried *agave* pulp, as well as Pacific coast seashells important in native religious ritual.

Other Jesuit records from the eighteenth century indicate Hopi blankets were a definite standard of value if not a precise medium of exchange in the trade Hopis conducted with tribes along the Colorado River to the west of Hopi (p. 52). The Hopis obtained red ochre and other ceremonial pigments in exchange for woven goods.

Farmer, Malcolm

1955 The Identification of Ho-vi-itci-Tu-Qua Pueblo. *Plateau* 28(2):44-45.

This is a companion article to Edmund Nequatewa's (1955) account of "The Destruction of Elden Pueblo." Farmer (p. 44) points out the identification of the pueblo Ho-vi-itci-tu-qua is "very difficult" since Nequatewa's story offers few details about the villages or their locations. He notes (p. 44), "Mr. Nequatewa decided upon Elden Pueblo, but it may have been one of the other villages which have been shown archaeologically to have been occupied in late prehistoric times." Farmer considers sites in the vicinity of Flagstaff, Anderson Mesa, and the Verde Valley. After reviewing archaeological data, Farmer concludes, "The evidence indicates that the Anderson Mesa area pueblos were inhabited at the same time that people were living in Chavez Pass Ho-vi-itci-tu-qua Pueblo might therefore be identified with Grape Vine Pueblo of the Anderson Mesa region."

Fewkes, J. Walter

1892 A Few Tusayan Pictographs. *American Anthropologist* 5:9-25.

In this article, Fewkes reports on a study of petroglyphs in the vicinity of First Mesa. His primary interest was in using the symbolic information encoded in rock art to elucidate the "history of aboriginal religious observances" (p. 9). Fewkes applies a direct historical approach with analogical reasoning and infers that the similarity in petroglyphs that occur at both occupied pueblos and ruins means that similar religious observances as observed ethnographically were conducted at the prehistoric sites. Fewkes concentrated his study on depictions of Kachinas and other religious icons.

The article contains a number of interesting, incidental observations of interest to the Hopi GCES project.

p. 10, Hopis were still producing petroglyphs in 1892.

p. 12, "The Hopi themselves are inclined to call all worn pictographs *he'-cä-to*, ancient, but it by no means follows that they are on that account very old."

p. 15, *Mâ'-cau-a* [Masaw] is "the god of the surface who controls growth, but not germination. He controls growth pure and simple, and as such is a beneficent being. It is to him that the small piles of sticks, twigs, stones, and other offerings which are constantly found near the trails are erected. An old woman with a bundle of fuel on her back climbing the trail will throw to *Mâ'-cau-a* her offering as she passes one of these rude shrines, and near by offerings of prayer sticks are made in several ceremonies. *Mâ'-cau-a* is also the god of death, the terrible one ... the malignant spirit ... who ... appears when hostilities first begin." Fewkes describes the appearance of Masaw during the hostilities with the U.S. Army at Oraibi in 1891.

p. 15, *Ko'kyan'wuch-ti*, Spider Woman, is the "goddess of wisdom; she can change her form at will."

p. 17, two parallel marks are "invariably symbolic of *Pi-o-kong*, one of the war gods."

pp. 17, re: *Ba'li'li'kong*, "In Hopi mythology the great serpent play a most important part. He is almost the exact equivalent of the Zuñi *Ko'-lo'wis'si*. Stories of his deeds are numerous. He seems to be the dualistic principle of life with *Mu'ing'wûh*, the earth, and makes cañons and rivers with a stroke of his tail."

p. 24, "... the friendship sign, two crescents ..."

Other common design elements in Hopi rock art described by Fewkes include the sun (*Dâ'-wa*), rain-clouds, rainbows, shields, phallic symbols, coiled spirals, whirlwinds, corn, animals, and Kachina masks.

Fewkes, J. Walter

1892 A Few Summer Ceremonials at the Tusayan Pueblos, vol 2. *A Journal of American Ethnology and Archaeology.* Houghton, Mifflin, New York.

In this collection of ethnographic observations, Fewkes provides some valuable first hand information about Hopi at a still-early period in American-Hopi relations. Because Hopis, at this time, were not yet disillusioned about the possibility of white scientists accurately portraying their cultural practices, they revealed significant information to their visitor. Fewkes shares the fruits of such a trusting collaboration. He explains (p. 3):

> I promised the priests that I would tell the Americans a true story of their religious ceremonials as far as I could understand them. Having given me their confidence, they told me much which might otherwise have escaped me. They wish Americans to know of their religious ceremonies, but they want the knowledge of them to be exact. The following pages are attempts to fulfill in part that promise . . . .

How capable Fewkes was at fulfilling this task, we cannot know with certainty. But, evidently, at some point Hopis became disenchanted with American anthropologists and ethnologists who tried to put in English words the meaning of their own ancient rituals. With this discontent came a ceasing of such open exchange. Hence, despite its inadequacies, Fewkes' early accounts provide some of the most extensive information about Hopi culture available until recently when Hopis began to take this work into their own hands.

The most sacred ceremonies of the Hopi occur in the underground chambers, which Fewkes refers to as kib-vas (otherwise known as kivas). One must be initiated into the fraternity of a kib-va to enter that chamber. Fewkes reports that he and his assistant, J. G. Owens, went through the initiations so that they could observe the events below. Consequently, Fewkes was able to provide a detailed description of such a chamber. In part, Fewkes remarks that (p. 20):

> A little to the north of the middle line of the floor . . . a plank a few feet long is let into the floor, extending north and south. In the middle of this plank is a round opening a little larger than a broom handle, which is called the *si-pa-pu,* or entrance to the centre of the earth. It represents the traditional opening through which, in ancient times, the people came to the earth's surface, and is associated in the Indian mind with that opening through which individuals as well as races are born.

In a footnote, Fewkes continues his discussion of the *si-pa-pu,* writing, "In the old legends it is said that all people came upon the earth through the *si-pa-pu* " (note, p. 20).

Throughout Fewkes' descriptions of the summer ceremonials, he mentions the *si-pa-pu* numerous times. One of the more intriguing references to this symbolic place of emergence into this world occurs in the author's discussion of *Ni-man-ka-tci-na.* This is the festival which celebrates the departure of the Kachinas back to the San Francisco Mountains every July. In preparation for this significant event, priests perform certain rituals in their kivas. Fewkes describes the religious preparations very carefully. He explains that a rectangular earthen bowl called a *na-kwi-pi* is placed in its designated place on the floor of the kiva. Pointing outward from the *na-kwi-pi,* the priests lay four ears of corn around the bowl. These ears are carefully positioned in the directions of the cardinal points, in the order north, west, south, east. Next, the priests place two more ears on the floor, this time facing northeast and southwest from the *na-kwi-pi.* "The latter," Fewkes notes, "pointed directly to the *si-pa-pu* [refering to the symbolic one in the floor of the kiva]" (p. 74). Interestingly, southwest also corresponds to the direction of the actual *si-pa-pu* from the Hopi Mesas which, according to many Hopis, is in the Grand Canyon, just downstream from the mouth of the Little Colorado. Furthermore, Fewkes mentions that northeast and southwest signify the zenith and nadir, respectively. One can surmise that the nadir refers to the Underworld which lies below the *si-pa-pu.*

Fewkes, Walter J.

1892 *A Journal of American Ethnology and Archaeology,* vol. ii. New York: Houghton, Mifflin, and Company.

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Fewkes, J. Walter

1896 Pacific Coast Shells from Prehistoric Tusayan Pueblos. *American Anthropologist* 9(11):359-367.

Fewkes describes eleven species of shells from the Pacific Ocean or Gulf of California found as grave offerings in excavations at Homolovi, Cakwabaiyaki, and Tcübkwitcalobi. These species include *Pectunculus gigantus;* three species of *Conus; Turtitella tigrina; Cardium elatum; Melongena patula; Strombu galeatus; Haliotus fulgens; Oliva annulata; and Oliva hiatula.* Many of these shells were decorated and fashioned into jewelry or other ornamentation.

Other incidental information of interest includes comments on regional trails and Hopi cultural affiliation with the Gila-Salt region.

In describing Tcübkwitcalobi, Fewkes (p. 360) says the name means "Antelope-notch-place-of," and that it consists of "... two ruined pueblos built of malpais on the hills in Chavez Pass between 30 and 40 miles southwest by south of Winslow, where there is a break in the Mogollon mountains through which runs an ancient Hopi trail from the plains south of the Little Colorado to the Verde Valley and Tonto Basin."

Fewkes (p. 367) states he thinks it is probable that the Hopi culture came from the south, noting,

> ... that the ancestors of certain component clans of their people came from that direction into Tusayan is claimed by Hopi traditionalists. So far as my archaeological researches bearing on this problem are concerned, they verify that claim. The remote ancestors of the Patki people of Tusayan formerly inhabited the Gila-Salado drainage area, and will later be shown to be closely allied to the Pimas, so some other tribes of that slope.

Fewkes, J. Walter

1896 A Contribution to Hopi Ethnobotany. *American Anthropologist* 9:14-21.

Fewkes briefly describes sixty-seven plants used by the Hopis. Plant specimens were collected between 1891 and 1896, and identified by Dr. Sereno Watson. The specimens were deposited in the herbarium of Harvard University.

Fewkes (p. 15) observes that the Hopis, "... have more than once bridged over the failure of their staple crop, maize, by other plant foods not used by whites for food."

Fewkes documents a number of plants identified during the 1993 Hopi river trip, including (but not necessarily limited to):

p. 15, "*Thelesperma gracile.* (*Hoyoisi*: from *hohovaktü,* sweet smells; *sihü,* flower.) — An infusion of the flowers is drank as a beverage. A stronger infusion is used in the liquid in which the Hopi boil yucca fiber, for basketry, until they acquire a reddish-brown color."

p. 15, "*Stanleya* sp. (*Kwibi*) — In the spring its leaves are boiled and eaten."

p. 16, "*Cleome integrifolia.* (*Tümi*: from *tüwa*, land (sand); *hümita*, corn kernel.) — The boiled leaves and flowers are highly esteemed.:

p. 16, "*Rhus trilobata.* (*Cübi*: from *cükü*, pungent, alluding to its acid berries, which are called *sivwipsi*; a syncopated form of *cübisiadta, cübi,* its seeds.) — They are eagerly eaten by young people. Its twigs are used for many ceremonial purposes; also for coarse basketry. The buds are regarded as medicinal. The dry shrub is one of the four prescribed fuels for the kivas."

p. 17, "*Opuntia.* (*Yüñü.*) — In the spring and early summer the succulent stem is boiled, divested of its spines, and eaten."

p. 17, "*Yucca angustifolia.* (*Mohü.*) — Its soapy root is called *mohü mobi.*"

p. 17, "*Oryzopsis cuspidata.* (*Lehü*: possibly from *leñya,* flute, reed whistle; *cühü*, hay.) — It gives its name to one of the clans in the group with which the Flute clan is associated."

p. 17, "*Juniperus occidentalis.* (*Hoko*: from *hohü,* arrow; *kohü,* wood.) — So called because its wood splits into straight arrow-like fragments; it is frequently called *hotcki,* referring to the entire tree."

p. 19, "*Castilleria linariæfolia.* (*Mansi*: from *mana,* maid; *sihü,* flower.)"

p. 19, "*Nicotiana attenuata.* (*Piba*: from *napi*, leaf; *pahü*, moisture.) — This tobacco is smoked in pipes on all ceremonial occasions and forms a part of nearly all prayer offerings."

Fewkes, J. Walter

1897 Tusayan Totemic Signatures. *American Anthropologist* 10(1):1-11.

In the words of Fewkes (p. 1), "The aim of this article is to consider the totem signatures of the Hopi Indians as a key to the meaning of the pictographs in Arizona." As Fewkes uses the term, totemic signatures are clan symbols as depicted on rock art and other media. Fewkes procured information about totemic signatures from the clan marks made on pay vouchers by his Hopi workmen who could not write, and from petitions to the U. S. Government made by Hopi leaders. While the names of Hopi people are not necessarily related to their clan, Hopis use clan symbols to represent themselves in a pictorial fashion. Fewkes infers that petroglyphs with similar designs also represent clan symbols.

Three figures illustrate the symbols made by Hopis belonging to clans in nineteen Hopi phratries from Walpi, Sichomovi, and Oraibi, i.e., *Ala* (Horn), *Patki* (Water-house), *Teüa* (Snake), *Pakab* (Reed), *Kokop* (Firewood), *Tabo* (Rabbit), *Tüwa* (Sand, Earth), *Honauûh* (Bear), *Katcina* (Katchina), *Asa* (Tansy Mustard), *Pila* (Tobacco), *Honani* (Badger), *Atoko* (Crane), *Patuñci* (Squash Flower), *Kele* (Pigeon-hawk), *Kala* (Gopher), *Patcibkwaca* (Lizard), *Awata* (Bow), and *Teve* (Greasewood). Symbols of clans in five phratries from Hano are also illustrated, i.e., *Tañ* (Sun), *Ke* (Bear), *Sa* (Tobacco), *Kulon* (Corn), and *Okuwa* (Rain-cloud). Different clans within the phratries often use distinct symbols.

Fewkes article is useful in (1) documenting the use of clan symbols in the nineteenth century to signify individual clan members, and (2) providing baseline documentation to identify and interpret specific clan symbols. Fewkes also makes a number of interesting observations.

Fewkes (p. 2) states, "... the totemic signatures or pictographs of the ancient people are identical with those now made by the Pueblos ..." Fewkes notes these symbols are found in a variety of physical settings, including rocks, cliffs, and walls of ancient ruins.

Fewkes believed the clan symbols found in the form of rock art provided evidence for the routes of Hopi migrations. For instance, he states (p. 3),

> The trail of migration of the Patki people was from the far south, Palatki, and they have been traced at Homolobi and Chaves Pass, where their pictographs are still to be seen with those of other Hopi gentes from that region. Perhaps the most striking symbol which they brought from the far south was the semicircular rain-cloud figure so often depicted in the totem signatures.

Similarly, on p. 6, Fewkes says, "The peculiar totem signature of the Patki, Tabo, Squash, Paroquet, Crane, Lizard, etc. may be expected in pictographs near the ruins of the Little Colorado south of Tusayan and along the Hopi Trail through Chaves Pass along the Verde valley."

Fewkes, J. Walter

1897 The Sacrificial Element in Hopi Worship. *Journal of American Folklore* 10(38):187-201.

Fewkes analyzes Hopi religion in this article to investigate the concept of ritual sacrifice. Although many of Fewke's theoretical ideas are essentially non-Indian notions naively applied to Hopi behavior, he does make several interesting empirical observations or speculative reconstructions concerning Hopi religion.

Fewkes (p. 188) notes that the oral traditions of Hopi migrations indicate that each cluster of families called a pueblo was formed "... from a drifting together of families or larger groups, each of which contributed certain rituals. In that way the ritual became composite; a mosaic of rites, one or more portions of which were added by incoming families." He elaborates this idea by saying,

> The general character of each of these additions was similar, but each was, in a sense, distinct or a unit. The resultant union of these components was, therefore, a congeries of small family religions of the same general character ...
>
> As these several families consolidated, each component preserved its own ... system, and thus we find them to-day, existing side by side, each family jealously preserving from knowledge of others its secret rites, and equally unwilling to intrude on those of other families. In its structure, therefore, the present Hopi ritual may be regarded as an aggregation of several family rituals, just as the pueblo is populated by inhabitants of several phratries, formerly separated.
>
> As the families bringing these characteristic rites came to Tusayan from different directions, naturally there is a variation their character.

Fewkes (pp. 189-192) educes examples of the concept of human sacrifice from Hopi accounts of the offering of a chief's son and daughter to appease an angry god (Palülükoñ, the Great Plumed Serpent) who caused a flood. He also interprets the burial of eagles that are ritually killed and the treatment of rabbits after a rabbit hunt as forms of animal sacrifice.

Supernatural beings (gods) are represented by the Hopi in three ways: (1) by living people; (2) by graven images; and (3) by symbolic paintings (pp. 190-191). He adroitly observes (p. 191), "There are probably all shades of opinion among the Hopi in regard to the nature of their idols, and while the thinking men regard them as symbols, and reverence them for their antiquity, others believe that the supernatural being which the image personifies may temporarily inhabit the idol."

Fewkes (p. 196) considers prayer meal and prayer sticks to be a "substitution form of sacrifice" that have been reduced to a symbols.

The exact performance of prescribed rituals at Hopi is more important than dogma pertaining to cosmogony or theogony (pp. 200-201). As Fewkes says, "The ritual is the important, the myth the subordinate element." Fewkes (p. 201) concludes by saying,

> Each pueblo, when discovered, was governed by a council of old men, and the office of governor of the village is probably a late evolution. Each chief of the council has his own sacerdotal rites bequeathed to him to perform. He recognizes the tutelar supernatural of his society, but a supreme deity exists no more in his religious than in his political system. There apparently never was a supreme chief over all the Tusayan villages, much less over all the pueblos. The different towns may have acted in union for a certain object, but they never gave up the control to one leader. Thus the cults of each phratry developed independently, and environment made the lines of their evolution parallel.

p. 20, "*Atriplex confertifolia.* (*Hoyavako*: from *hovaktü,* sweet smells.) — The water in which the leaves of this plant have been boiled is used to mix the corn meal for making the pudding called *ho-ya-vak-pikinni* (*Piki amiyata*), piki or paper bread, covered in.). This meal pudding is poured into a large earthen jar and baked in the characteristic small cooking-pit common in Tusayan."

p. 21, "*Artemisia frigida.* (*Küiñya*: from *küyi,* water; *ñaa,* root.) — A sprig of this plant is attached to the *paho* or prayer emblem and is regarded as efficacious in petitions for water."

Fekwes, J. Walter

1898 The Feather Symbol in Ancient Hopi Designs. *American Anthropologist* 11(1):1-14.

Fewkes discusses "paleography" (i.e., interpretation of ancient symbols) as it relates to the feather motif on Hopi ceramics. He notes (p. 5) that "Many ancient designs are incomprehensible to living Hopi priests, and their interpretations are in some cases simply conjectural. The decay in knowledge of the meanings of old symbols is due to the fact that most of the ancient symbolism has been replaced by the modern." Nonetheless, Fewkes (p. 4) uses the "testimony of living priests" to interpret feather symbols.

Much of the discussion centers around the design layout of feathers in a generic sense but Fewkes (p. 10) does offer the following observation about eagle feathers. "The presence of eagle feathers on ancient Hopi disks, symbolic of the sun, is frequent, and feathers are still inserted in a corn-husk border on the margin of hoops covered with painted buckskin representing the sun in modern Tusayan ceremonies."

This article thus helps to document the importance of eagles in both prehistoric and historic Hopi culture and religion.

Fewkes, J. Walter

1898 Preliminary Account of an Expedition to the Pueblo Ruins Near Winslow, Arizona, in 1896. *Smithsonian Institute, Annual Report 1896*, pp. 517-540. Washington, D.C.

In this report, Fewkes reviews the findings from his fieldwork of 1896 in which he examined evidence of Hopi clan migrations from the South. His findings from the excavations of four Pueblo ruins scattered between the valley of the Little Colorado River and the Hopi Mesas strongly supports the contention that some Hopis arrived at the Mesas from a southwardly direction. Examples of Fewkes' affirmative evidence are the the presence of burial votive offerings, remnants of pottery with familiar designs, traditional pahos, and more.

Fewkes mentions specifically some important early demonstrations of the presence of Grand Canyon in these Hopis' ritual customs. For instance, he writes: "It was interesting . . . to note that in the large flat slabs on the floor of one of the larger chambers we found small round holes, carefully made, which suggested the sipapû, or symbolic opening, the orifice through which, it is held, races originally emerged from the underworld" (p. 523).

Also worth noting is Fewkes' conclusion from an analysis of pottery designs that these early Hopi ancestors "associated the dead with rain gods" (p. 535). In other anthropological literature on Hopi, the connection between the dead and Grand Canyon is readily made, suggesting that it is to the Canyon that the spirit of the dead go after death. Coupled with this is the claim by a travelling companion of Bill Williams that a Hopi Chief told Williams that "rain god made" the Grand Canyon (*St. Louis Globe-Democrat,* Dec. 24, 1911, p. 5).

Fewkes, J. Walter
1898 The Growth of Hopi Ritual. *The Journal of American Folklore* 11(42):173-194.

In two paragraphs, Fewkes provides a brief summary of the growth of the Hopi people and their ritual as recounted in oral tradition. He says (p. 173),

> In prehistoric times a semi-migratory, agricultural band of Indians, the majority of whose members belonged to a clan which regarded Snake beings as their totem, began the erection of stone habitations among the foothills of the East Mesa of Tusayan in northeastern Arizona. The village they built was the beginning of a pueblo which was later moved to the summit of the mesa and called Walpi, "the place of the gap." Several families with other totems, one after another, joined the original founders of Walpi and the population of the ancient pueblo increased in size. Increments came from all directions, especially from the south and east, the former forced from the home by the inroads of Apaches, the latter by the Spanish invaders. These colonists arrived in clans, and on their reception at Walpi were assigned certain building sites adjoining houses already erected, and as a result the combined habitations enlarged the pueblo in such a way that different sections of it were inhabited by different clans, a localization of which can still be detected.
>
> It would seem that each of these incoming families possessed a clan totemism more or less distinctive, and, long after each was united with the others retained ceremonies distinctive of that worship without molestation. There was no spirit of interference of one with another; for each family was allowed to worship as it liked, and no one thought of forcing its rites on its neighbors. For some time these separate family rites were retained in the clans which introduced them, but as the people, by intermarriage, became more homogeneous, religious societies developed and outgrew the boundaries of families, to which in early times they were limited.

In the remainder of the article, Fewkes elaborates this basic historical reconstruction using evidence other than legendary sources, i.e., using ethnographic and archaeological data.

Fewkes (p. 174) thinks the *Katcina* cult is "extra Tusayan in origin, and was not a part of the original Hopi ritual, but was added to in comparatively recent times by colonists from pueblos of other stocks."

In a footnote to the importance of "palæography or predocumentary evidences" Fewkes (p. 174) states, "Picture-writing in the past, as in the present, has served the Hopi as a means of expression of their ideas of religious symbolism, and is most important in its teachings." Fewkes (pp. 174-181) discusses Hopi iconography as found on archaeological and ethnographic ceramics to postulate that some styles of historic Hopi pottery were

introduced or influenced by immigrants from the Rio Grande pueblos. As he says (p. 178), "The predominance of figures of *Katcinas* on modern ware, and their absence on ancient, indicates that the cult to which they belong is of late intrusion, or of equal age with their advent."

Fewkes (p. 180) notes that,

> The dwellings of the *Katcinas* are traditionally said to lie in the four cardinal points,—Kicuba in the north, Mt. Taylor in the east, Winima, near Saint Johns, in the south, and the San Francisco Mountain in the west. The place called Winima ... known to the Zuñis as a sacred place, it likewise regarded by them a home of the *Koko*, the Zuñi equivalent of the *Katcina*. As the traditions of both of these pueblos centre on this place, it is not unlikely that at least some of the *Katcinas* were known to people who once lived in that neighborhood. This place is distinctively stated to be the home of Shalako by both Zuñis and the Hopi.

Having presented evidence that the *Katcina* cult was "intrusive rather than autochthonous" (p. 180) among the Hopi, Fewkes discusses in considerable detail what he considers to be the essential primary elements of the Hopi religion, i.e., totemism (clans), to better understand the relation of the *Katcina* cult to the preexisting religion (Fewkes (pp. 181-193). He thinks that the meaning and content of rituals associated with totems changed as environmental and historical conditions changed, i.e., as people developed from hunters into agriculturists. Totemism originates as a psychic phenomena but it is modified by climatic and environmental conditions. Fewkes thinks the Hopi religion is a "composite totemism" (p. 180). He discusses a speculative reconstruction of the history of several major clans, including the Snake, Horn, and Water Clans.

As a summary, Fewkes (pp. 193-194) states,

> As far as can be sketched from material at hand, the growth of the Hopi ritual has been somewhat as follows: The earliest cult was that of the snake family, a form of zöötotomism, the most important surviving ceremony of which is the famous Snake Dance.
>
> The first addition to this was the contribution of the Horn family, whose important survival in modern times is the Flute observance.
>
> The Water-House or Cloud people added a solar and rain-cloud totemism, with equinoctial and solstitial ceremonies and the worship of a Plumed Serpent.
>
> Several clans, mostly from the East, introduced a composite cult, in which zöötotomism and nature element worship are combined and divinized ancestors represented by characteristic masked personifications called *Katcinas*.

There were other additions from conquered pueblos, as Sikyatki and Awatobi, and still others, the origin of which I am ignorant. The growth has been a development by addition of new and an evolution and modification of existing elements. Every incoming family has added its peculiar rites, while neighboring pueblos which have been conquered have contributed their quota, making a complex ritual unexcelled in any tribe still living in the United States.

The totemism of component families has taken the form of elaborate monthly ceremonies, the participants in which are no longer limited to the clan by which the ceremony was introduced. Totem worship in each has become the worship of anthropomorphic parents, male and female, a reverence which amounts to worship of the souls of the dead; of beasts or animals as sharing in part a supernatural element possibly due to metempsychosis, and of the great elements foreign to simple totemism.

Fewkes, J. Walter

1900 Property-Right in Eagles Among the Hopi. *American Anthropologist* 2:690-707.

Fewkes suggests the Hopis were in an "early stage" of the development of "zoöculture" because they had a property right in eagles but these birds were not domesticated and were used for religious purposes rather than food or clothing. In arguing this thesis, Fewkes makes a number of interesting observations about the Hopi use of eagles.

Fewkes notes eagles and eagle feathers are highly valued at Hopi. Like turkey feathers, the plumage of eagles was used in the preparation of many ritual artifacts and ceremonies. In the late nineteenth century eagles were not kept in cages (as they were at Zuni Pueblo) but Fewkes notes all Hopis were aware of the ownership of birds. The rights to collect feral birds from specific areas was vested in clan membership.

Fewkes states (p. 692), "Anyone in Tusayan who kills an eagle, not his own, within about fifty miles of Walpi, trespasses on the property-right of others." He adds (p. 693), "Unfortunately, however, this right is often violated by white men or by the Navajo, who see no reason why wild birds should belong to a person living perhaps forty or fifty miles away."

In the words of Fewkes (p. 693), "... proprietary rights with reference to the eagle inhere in the clan rather than the individual; nests, eaglets, and adult eagles are owned by the whole clan, not by any one member, although the male head or chief of that clan represents its rights; he speaks of them as his property, and has inherited by right to do so through his mother. This is an ancient form of ownership which prevails likewise in the case of land, springs, peach-trees, houses, and other possessions."

Fewkes (p. 693) asserts that, "As a rule ... the nests of eagles near village ruins are owned by the descendants of clans which once lived in their neighborhood." He adds that (pp. 693-694) "certain clans claims rights in springs near ruins in which their forefathers lived, and at times of ceremony they revisit these ancestral springs to obtain water which is considered particularly efficacious in the performance of ancient rites; thus, also, certain tracts of land are regarded as the property of this or that clan. The present ownership of eagle-nests in the vicinity is a survival of a similar claim." He thinks the contemporary claims of ownership of eagle nests is "directly related to the former migrations of the clan."

Fewkes analyzes the oral traditions of Hopi clan migrations to prove this point. He finds that clans thought to have migrated from the north, e.g., the Snake and Horn clans that came from Tokonabi, own eagle nests to the north of Walpi. Clans that came from the east, e.g., the Bear, Spider, and Firewood Clans, own nests to the east of Walpi. The Tobacco, Lizard and Raincloud Clans migrated from Palatkwapi in the south through

Homolobi and they own nests in the vicinity of their ancestral sites in this region. For instance, the Lizard Clan owns nests in the vicinity of Bitahochi and Kintiel.

Fewkes notes (p. 699), "The eagle-nests west and northwest of the East Mesa, along the lower part of the Little Colorado (*Pala-baiya*), and portions of the Great Colorado (*Pisis-baiya*), belong to clans of Oraibi and the Middle Mesa pueblos ... Probably many of their ancient clans came from numerous houses, now in ruins, within the drainage of the Rio Colorado."

Fewkes concludes, "It thus appears that the present claims to ownership of eagle-nests are based mainly on the situation near former places of residence. This fact can hardly be regarded as a mere coincidence, nor do the Hopi consider it as such; indeed, they regard this proprietorship as a proof that the country in which eagle-nests are situated is theirs, and have repeatedly urged me to so inform those engaged in surveying the boundaries of their reservation." Fewkes thinks the "legendary claims" of clan migration are supported by "the situation of eagle nests still owned by various clans."

Fewkes describes ancient and contemporary methods of catching eagles (pp. 700-702). The ancient *kwamakta*, or eagle hunt, was accompanied by ceremonial rites and entailed the use of small circular stone enclosures about four feet high. These structures, called *kwamaki* (eagle-hunt-house), served as hunting blinds. Hopis hiding in these structures used ritual songs and rabbit meat bait to draw eagles to the them. The eagles were then captured by grabbing them by a leg. Fewkes (pp. 700-701) thought that these structures, "... recall the small stone towers so common in some parts of the southwest, especially along the Colorado and its tributaries. These towers, as a rule, are small; they are situated on elevated sites, and bear little evidence of long-continued use as human habitations ... Many are situated on crags which are known to have been frequented by eagles, and we have the assertion of the Hopi that there are many eagle-houses in the north."

In the late nineteenth century, eagles were collected by removing young eaglets from their nests. Fewkes notes "It is regarded as wrong to take all of the young from the nest at any one time, and it is evidently due to this taboo that the perpetuation of the species in Tusayan is effected."

Fewkes notes that both the ancient and contemporary collection of eagles was accompanied by prayer offerings and other rituals. The ritual burial of eagles after the *Nimán* ceremony in cemeteries near the villages is described (p. 702). Fewkes also briefly describes Hopi prayers for the increase of eagles, including prayers during *Soyàluña,* the Winter Solstice ceremony.

Fewkes, Jesse Walter

1900 Tusayan Migration Traditions. In *19th Annual Report of the Bureau of American Ethnology for the Years 1897-1898,* Pt. 2, pp. 573-634. GPO, Washington.

Fewkes (p. 578) analyzes Hopi clan traditions collected at Walpi as a guide to archaeologists to help identify the ruins of northern Arizona, and to form a composite picture of Hopi ritual, language and secular customs.

Fewkes (p. 579) notes that "An honest traditionalist immediately declares his ignornance of the history of a clan that is not his own, and in the presence of a man of that clan will refer to him when questioned."

The Tcüa (Snake) and the Ala (Horn) clans formerly lived at Tokonabi (p. 587). Fewkes confusingly places Tokonabi "near the junction of the Little Colorado with the Great Colorado, in southern Utah."

Fewkes (p. 592) observes that "... instances where clans have migrated to new localities their chiefs often return to ancestral shrines, or make pilgrimages to old springs for the purose of procuring water to use in their ritual."

Clans that lived along the Little Colorado River before arriving at Hopi include Squash, Crane, Pigeon-hawk, Lizard, Sand, Rabbit, and Rain-clound. (pp. 595-597).

Fewkes, Jesse Walter

1903 Hopi Katcinas Drawn by Native Artists. In *Twenty-first Annual Report of the Bureau of American Ethnology*, pp. 15-190. Government Printing Office, Washington.

Fewkes (pp. 163-164) describes the Pakiokwik (Fish katchina) that

> ... was introduced into Hano by a man name Kanu. A design representing a fish is depicted on the face. This is an excellent example, of which there are many, serving to show how a man who in recent years has seen an object which he believed to be efficacious in bringing rain, has made a picture of it on his mask.

Plate LXII illustrates this katsina, depicting a green fish painted on the front of horned helmet mask. The fish is placed where the mouth is on the mask.

Fewkes, J. Walter

1906 Hopi Shrines Near the East Mesa, Arizona. *American Anthropologist* 8:346-375.

In this journal article, Fewkes summarizes his findings from years of research among the Hopi people. He has combined a wealth of information about Hopi shrines into an encyclopedic format, making this an exceptional reference.

Fewkes describes one shrine located within the network of canyons which forms the Grand Canyon. This shrine is called the Shrine of Salt Woman. Fewkes writes (pp. 352-53):

> Light is thrown on the situation of Hopi shrines by a study of trips made by this people to the Grand Canyon to obtain salt. At that time they carried offerings to the Woman of the Hard Substance, sometimes called the Salt woman, who had a shrine in or near the canyon. So far as I can trace traditions, it would seem that the Spaniard Cardenas in 1540 followed the same trail that the Hopi still use when they visit the Havasupai Indians in Cataract canyon, or practically part of the old route used in these excursions after salt. This trail apparently crosses the Little Colorado not far from the Moenkopi trail at Tanner crossing, a few miles below Black falls.
>
> It is said that before gathering the salt which hung from the cliffs in the form of "icicles," the Hopi deposited prayer sticks, one before the image of the Salt goddess and the other before that of the God of War. It was their custom to allow themselves to be suspended over the edge of the cliff by ropes, in order that they might break off the salt "icicles" and transfer them to their sacks.

Fewkes also notes (p. 360), that

> Almost every Hopi pueblo has in the middle of its plaza a shrine that is generally one of the best made of these structures in the neighborhood. These plaza shrines are to two kinds: (1) those whose cavities are sunk below the level of the ground and always provided with a stone covering; and (2) those with lateral walls above the surface of the ground, having lateral entrances. Both types are sometimes said to represent symbolically a mythological opening from the under-world through which the races of men emerged.

Fewkes (p. 360) adds, "Sipapû is, of course, a general name for the entrance of the underworld, and is applied likewise to a symbolic representation of the same, as a hole in the floor of a ceremonial room or a depression in the plaza."

With regard to springs, Fewkes (p. 370) states, "In a general way every spring is supposed to be sacred and therefore a place for the deposit of prayer sticks and other offerings.

Fewkes (p. 374) notes, "Ownership in shrines and springs, like that in eagle nests, is hereditary in clans among the Hopi. The right to a spring is one of the most ancient of all ownerships in realty. So sacred are these places to the Hopi that they are associated with tribal gods and clan tutelaries; consequently, proprietorship in them is not abandoned even when the clans in their migrations seek new building sites."

In concluding the article, Fewkes (pp. 374-375) recommends that archaeologists pay attention to the shrines in the immediate neighborhood of ruins, and gather all the information they can regarding their contemporary use. As he says,

> This knowledge, taken in connection with legends of migrations, will aid in identification of clan affiliations of former inhabitants of our Southwestern ruins. Although in most instances these shrines are little more than rings of stones, occasionally an offering is found in them that reveals the presence of reverence in some mind, and it is generally true that the one who made this offering is related in some way to former inhabitants of the neighboring pueblo.

Fewkes, J. Walter

1906 Hopi Shrines Near the East Mesa, Arizona. *American Anthropologist* 8:346-375.

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Fewkes, J. Walter

1906 "Hopi Shrines Near the East Mesa, Arizona," *American Anthropologist,* vol. xiii, pp. 346-75.

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Fewkes, Jesse Walter

1907 Hopi. In *Handbook of American Indians North of Mexico,* Part 1, edited by Frederick Webb Hodge, pp. 560-567. Smithsonian Institution, Bureau of American Ethnology, Bulletin 30. Government Printing Office, Washington.

This brief synopsis of Hopi ethnography documents a number of facts pertinent to Hopi ties to the Colorado River and the Grand Canyon.

On p. 563, Fewkes notes that "Ruins of villages which the traditions of the Hopi ascribe to their ancestors are found as far N. as the Rio Colorado ..."

Fewkes (p. 565) observes that "The Hopi believe in a future life in an underworld."

Fewkes (p. 566) notes, "In Hopi mythology the human race was not created, but generated from the earth, from which man emerged through an opening called the *sipapu*, now typified by the Grand canyon of the Colorado. The dead are supposed to return to the underworld."

Fewkes, J. Walter

1910 Shrines. In *Handbook of the American Indians North of Mexico,* edited by Frederick Webb Hodge, Part 2, pp. 558-559. Government Printing Office, Washington.

Indian shrines in general are defined (p. 558) as "Places where sacred offerings are deposited or cult images or objects are set up They are fixed or portable ..." Fewkes describes Hopi shrines as a "typical" example of shrines in general.

For the Hopis, Fewkes notes (p. 558) "Among those people any special spot consecrated to supernatural beings, where prayer offerings are made, is called a *pahoki,* or 'prayer house,' generally translated 'shrine.' ... A Hopi shrine differs from an altar in being a place in which the offerings remain permanently, or until they or their essence are supposed to be removed by the gods." He adds (p. 558),

> Every great ceremony has its special shrine, but in some of them prayer offerings are made in all ceremonies. Many shrines have nothing to mark them except prayer sticks ... Common forms of shrines are circles of small stones or even a single stone, caves, or clefts, a natural depression in a bowlder, or any object symbolically marked. The most elaborate shrines are sealed stone enclosures, sometimes painted with symbols, and containing symbolic representations of supernatural beings, idols, water-worn stones, or fossils. Shrines may be classified either on the basis of their form and contents or on that of the supernatural beings to which they are dedicated. Of the latter, among the Hopi, there are those of the Earth and Sky gods, Kachina shrines, and shrines of numerous lesser supernatural beings.

Fewkes briefly describes several of the more than 100 shrines in the vicinity of First Mesa. He notes (p. 559),

> Human or animal images of wood and stone, concretionary or botryoidal stones, carved stone slabs, and fossil shells are among the permanent objects, not offerings, found in Hopi shrines. The temporary offerings on shrines are prayer meal and pollen, sticks, clay effigies of small animals, miniature bowls and vases of water, small bows and arrows, small dolls, turquoise, shells, and other objects.
>
> Some shrines are known by the character of their offerings; thus, a warrior's shrine contains netted shields, bows, and arrows; an eagle shrine, painted wooden imitations of eagle's eggs. Places where ceremonial paraphernalia are kept partake of the sacred nature of a shrine, and caves resorted to for prayer are considered in the same light. All springs of water are places of prayer offerings, and each has a shrine either near by or remote.

Fletcher, Colin

1967 *The Man Who Walked through Time.* Vintage Books, New York.

Fletcher (pp. 183-185) eloquently describes the motivations of a recreational hiker who visited the Hopi Sipapu. At the time he hiked up the Little Colorado River to the Sipapu the spring was still flowing out the top. He describes the awesome beauty of the spot and his musings about *homo sapiens.* He ultimately decided that his attempt to project himself into the mind of the Hopi who "discovered" the Sipapu was "an empty intellectual exercise" and that if he had visited the Sipapu on another day his own thoughts would "have held different and deeper meanings."

Foreman, Grant (editor)

1941 *A Pathfinder in the Southwest: The Itinerary of Lieutenant A. W. Whipple.* University of Oklahoma Press, Norman.

In 1853-1854, Lieutenant A. W. Whipple led a survey of the 35th Parallel in search of a railroad route. Foreman edited Whipple's journal from that expedition.

Whipple recorded in his notes that the Hopis "are . . . supposed to have knowledge of the region [west of the Little Colorado] and we intend to seek among them for a guide" (p. 149). As Whipple approached Hopi territory, he sent two of his Zuni guides to recruit Hopis for such purposes. None appeared. The Zuni guides returned from the Hopi villages with a few gifts and this explanation:

> The smallpox had swept off nearly every male adult from three pueblos. In one remained only the cacique and a single man from a hundred warriors. They were dying by fifties per day; and the living, unable to bury the dead, had thrown them down the steep sides of the lofty mesas upon which the pueblos are built (Foreman 1941:149).

Aside from this tragic report, Whipple's journal contains little useful information about the Hopi, and states nothing concerning Hopi ties to the Grand Canyon.

Forrest, Earle R.

1961 *The Snake Dance ... of the Hopi Indians.* Westernlore Press, Los Angeles.

In a section titled "Legend of the Snake Dance" Forrest (pp. 28-33) relates two versions of the Tiyo narrative as documented by Fewkes.

Foster, Gene

1954 Petrographic Art in Glen Canyon. *Plateau* 27(1):6-18.

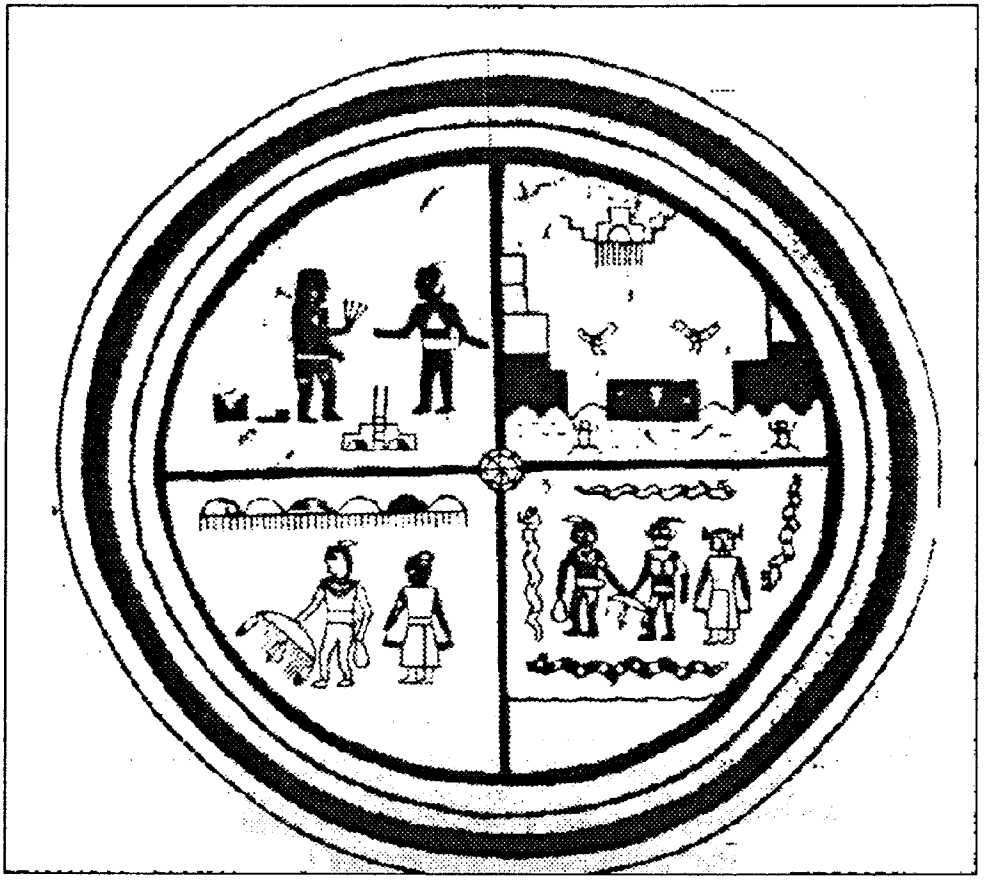
This article describes petroglyphs recorded in the Glen Canyon stretch of the Colorado River. Foster does little more than verbally describe fourteen panels that are also illustrated. Foster (p. 15) suggests two petroglyphs at NA 5369 "are reminiscent of Hopi Red Ant and Reed clan symbols."

Fred Harvey

n.d. *The Watchtower Guide*. Published by Fred Harvey, An Amfac Resort, Grand Canyon National Park, Arizona.

The Watchtower at Desert View is a 70 foot tall structure designed by Mary Colter and constructed in 1932 by Fred Harvey and the Santa Fe Railroad. The Hopi artist Fred Kabotie painted spectacular murals inside the structure. This pamphlet explains some of the Hopi murals, including a large circular painting that tells the "Snake Legend," which is said to be the "story of the first man to navigate the Colorado." The pamphlet says,

> Again we find the four directional colors in the four quadrant panels. The story begins in the upper-left hand panel ("north") with a Hopi chief giving prayer sticks to his son before sending him on a hazardous exploration of the Grand Canyon. The purpose of the trip is discovery of the legendary Snake people, reportedly in possession of the power to make rain, which is badly needed by the desert clan of the Hopi. The upper-right hand quadrant ("west") shows the son's boat floating down the Colorado River between stylized Canyon Walls. The lower-right hand quadrant ("south") depicts the Snake priest presenting the bow, symbol of the snake clan, to the traveler who already has the secrets of rain making "in the bag." So well is he received that the Snake priest's daughter (to the right) is given him as his wife. On the fourth, lower-left hand panel ("east") the young couple is shown on their honeymoon trip back to the Hopi clan. The blessings of the Snake people are upon them, for the bow is dripping water and rain is falling from six different clouds.
>
> The painting also symbolizes the Center of the Universe in the design in the center of the circle, and Light and Life (identical in Hopi thinking) in the four circular colored bands around the four quadrants ...



Circular Painting by Fred Kabotie depicting the "Snake Legend"

Fred Harvey

1933 "*De-Ki-Veh.*" Fred Harvey Company, Grand Canyon National Park, Arizona.

This is the printed program that accompanied the dedication of the Indian Watchtower at Desert View in the Grand Canyon National Park on May 13, 1933. The subtitle of the program states,

> *Ali-Ksai!* The Hopi of the Second Mesa, with their Chief man, Nuvamsa, having accepted the invitation of their brothers, the Hopi of the Grand Canyon, to "bless the kiva" of the Indian Watchtower, in turn invite you to attend the ceremonial dances.

The festivities included secret rituals conducted in the "kiva" by Hopis, followed by public dances at 2:00 p.m., an intermission with a Hopi feast and Anglo barbecue; followed by more dances lighted by bonfires at 8:00 p.m.

On p. 7, the programs states,

> De-Ki-Veh, "The Blessing of the Kiva," A Hopi ritualistic ceremony as performed before invited guests ... It is believed that this is the first time this ceremony has ever been celebrated away from the Mesas, and even there it has not been witnessed in many years by any white man. As the ritual is in the Hopi tongue and the dance is symbolic, an explanation is here given. This description is based on information furnished by Peter Nuvamsa.

In part, the described ritual entails calling the "Expected Ones" who approach out of the Grand Canyon. The ceremony that is described is said to be the last one of the three that accompany the blessing of a kiva. The other two, the "Laying of the Cornerstone" and the "Feeding of the House" are said not be dances and are held in secret.

Galvin, John (editor)

1966 *Western America in 1846-1847: The Original Travel Diary of Lieutenant J. W. Abert who Mapped New Mexico for the United States Army.* John Howell Books, San Francisco.

This book presents the travel diary of Lieutenant J. W. Abert, who came to the New Mexico territory in 1846-1847 to map the region for the United States Army. During his travels, Abert visited the Hopi Mesas, arriving on October 19, 1846. He spent one day with the Hopi, probably on First Mesa (pp. 46-47).

Abert's visit, although friendly, was brief and he had little time to gather data. Consequently, Abert reported nothing in his journal concerning Hopi use of the Grand Canyon.

Garces, Francisco

1965 *A Record of Travels in Arizona and California, 1775-1776, Fr. Francisco Garces,* translated and edited by John Galvin. John Howell Books, San Francisco.

Garces, a Spanish priest who traveled to Hopi in 1776, provides important information about the relation of Hopis to their neighbors along the Colorado River and Colorado Plateau, including the Havasupais and Utes. Garces records that the Hopis and their neighbors knew the trails and visited each other regularly.

p. 61, June 7, 1776, 107th day, in territory of Jaguallapais, "I gave them to understand that I wanted to go to Moqui. The strongest objections were raised by the Jamajabs, because they feared that the Hopi Indians might kill me; but my insistence finally prevailed."

p. 62-63, June 10. At an Yavipai rancheria east of Arroyo de San Bernabé, Garces met two Indian men and one woman who said they were "from near Moqui" and offered to accompany him there.

pp. 65-70, June 20, at rancheria on Jabesua River [Cataract Canyon; Havasupai]. Garces asked where they got horses and cattle. "... they answered from Moqui, where there are stolen livestock and many horses."

p. 68, June 28, at Yavipai Rancheria of 30 people north of the Little Colorado River. The captain of the Rancheria is a brother of the Jabesua Indian accompanying Garces. "Two Indians from Moqui had come to trade with these Yavipais. I found them dressed almost like Spaniards; they were wearing fine leather jackets. One of them kissed my hand. When I gave him a little tobacco and some shells he returned them to me. I called to the other, but he would not come near, nor kiss my crucifix, which the Yavipais offered to him. These Hopi Indians went away early the next morning, but I did not leave until the first of July."

p. 68-69, July 1. "I went one and a half leagues east-southeast and came to a river that seemed to me to be the San Pedro Jaquesila. Near it was a pueblo in ruins. I was told that the pueblo had belonged to the Hopi Indians, and that the signs of crop raising yet to be seen were their work since notwithstanding the distance from their homes they still come here to cultivate their fields. The river was low, with yellow water. After I crossed the river and some hills, I reached some very wide treeless plains. I traveled over them six leagues in the same direction and came to some of the Hopis' horse corrals, which were gorges or ravines not easy to enter or to leave, with not much water. From here the only mountain ranges that can be seen are to the south and southwest; they lead to the Apache country.

p. 69, July 2. Traveled six more leagues east and southeast and "came to the pueblo called Muca by the Yavipais, which is Oraibe, the first settlement in Moqui." Garces was accompanied by eight Yavipais, but only one old man and one young boy entered Oraibi with him since the Hopis reception was not very friendly. Garces provides a good

description of Oraibi and what he saw there. There was a Zuni visiting Oraibi while Garces was there.

p. 73, July 3, the Hopis "thought me a spy of the Tejua Yavipais and Chemequavas. They may have also heard that I came from the land of the Pimas and was minister to them, with whom they are at war, as the Indians of my mission had told me; from which, and having in mind the ruins that are found on the Gila River, I conjecture that Hopi territory once extended to there."

p. 74, Garces reports that several years previously he had asked some "old Subaipuris" who had built the ruins on the Gila, and he was told the Hopis had built them. "They added that these Apaches near by are not relatives [of the Hopis]; that there are many more [Hopis] further north where formerly they [the Subaipuris] used to go to fight though not climbing the mesas where those [Hopis] lived.

p. 75, Garces concludes, "... I am persuaded that it was probably the Hopis who came to fight; and that they, harassed by the Pimas, who have always been many and brave, abandoned these communities on the Gila River as they had deserted the pueblo I saw in ruins before reaching Moqui. They retreated to where they now live, at a favourable site well defended and safeguarded against any invasion."

p. 77, July 4. "I started back by the way I had come, and then I got lost by taking the way to the Yutas, who live to the north and are enemies of this pueblo of Oraibe and of the Muqui Cancabe, but not of the other Hopi Indians."

"I learned I was going the wrong way from two Hopis whom I came upon; they good-naturedly put me on the right course."

p. 92, Garces, reflecting on his travels, "The Hopis of Oraibe are friendly with all the Yavipais between the Gila and the Colorado, except the Tejua; with the Yutas; and with the rest of the Hopi pueblos, the missions of New Mexico, and all the southern Yavipais, who are the Indians that overrun these provinces; their enemies are the Tejua Yavipais, the Yutas of the Colorado, the Chemequavas, the Yumas, the Jamajabs, the Gileño Pimas, and the Cocomaircopas.

p. 94, "At present the Hopi Indians, with their trade in awls, digging-sticks, grub hoes, knives, woven stuffs, and strips of red baize, are masters over all the nations ..."

Galvin, John (editor)

1965 *A Record of Travels in Arizona and California, 1775-1776,* by Francisco Garcés. John Howell Books, San Francisco.

In this work, Galvin presents his own translation and edition of Garcés' travel diary from 1775-1776. A great deal of information is found in the diary which documents Hopi travel and trade throughout the Colorado River region.

While traveling from the Mojave villages to Hopiland, Garcés found Hopi products along his entire course. He mentioned Hopi trade items at the Mojaves villages and at Havasupai settlements stretching from the Grand Canyon to the Little Colorado River (pp. 62, 66). Garcés also mentioned that he passed two Hopis, out on a trading mission, while traveling to Hopiland (p. 68).

In some final notes to his *Record of Travels*, Garcés confirmed that Hopi's trading relationships spanned the Colorado River country, stating: "At present the Hopi Indians, with their trade in awls, digging-sticks, grub hoes, knives, woven stuffs, and strips of red baize, are masters over all the nations (emphasis added)" (p. 94).

Trading activity led to the formation of trails and, according to Garcés, such a physical manifestation of trade had been embedded onto the landscape between Hopiland and the Paiute region, north of the Grand Canyon. Garcés wrote in his journal that after leaving the Hopi villages, he "started back by the way I had come, and then got lost by taking the way to the Yutas" (p. 77). The trail to Paiute territory had to be well-worn to lure a traveler along its path.

Geertz, Armin S.

1983 *Book of the Hopi*: The Hopi's Book? *Anthropos* 78:547-556.

Frank Waters' study of the Hopis entitled, *Book of the Hopi*, is the subject of this article by historian Armin Geertz. Geertz explains that, although wrought with misinformation, this work "demands a response from the scientific community because of the very existence of its success and popularity. The book is worth more than an ivory tower cold shoulder" (pp. 547-48).

Yet, recognition does not translate into acceptance. Geertz writes this article to expose the problematic subjectivity of this book in light of its claim to authoritativeness. According to Geertz, Waters strengths are as a novelist--"a good, however untrained, scholar" (p. 554). His tendency to write fiction would not be a problem for Geertz, except that Waters proclaims to have written a factual, reliable account of the Hopis. Because of this claim to authority, Geertz believes Waters must be evaluated on such grounds. And on this level, Geertz has many points with which to quarrel.

To begin with, Geertz demonstrates how Waters' decision to abandon scholarly guidelines for his study permits him to do what he does best--to write fiction--under the guise of credibility. Geertz exposes Waters' inadequacies, explaining that in his chapter, "The Ceremonial Cycle," Waters "did not bother . . . with the courtesy of noting what are paraphrases of native accounts, what are his own eyewitness observations, what are Hopi interpretations and what are purely his own interpretations. In other words, an account claiming by its very language to be objective, is hopelessly mixed in with the author's own subjectivity" (p. 553).

Geertz also attacks Waters' claim to authority by discrediting the status of his co-author, Oswald White Bear Fredericks. Although White Bear is a Hopi, Geertz demonstrates that he holds an enigmatic standpoint for a Hopi due to his training in Western, Christian thought. Geertz argues that, among other problems, White Bear's deficiency as a representative for the Hopi people lies in the fact that he is "a missionary for the Hopi religion, a religion that *a priori* is not interested in missionizing." Furthermore, he is "trying to reproduce for the first time a non-existent systematic philosophy of the Hopi religion" (p. 551). Likewise, Geertz throws into question the credibility of the Hopi informants upon whom much of Waters' study is based. They too, like White Bear, have affiliations and views which throw their place among Hopis into serious question.

Throughout the review, Geertz contends many other points of methodological and research practices which were boasted by Waters. Yet, Geertz knows that these are insufficient to precipitate a fall from grace for this work. Geertz is behooved to recognize that the source of this book's popularity lies deep within the hopes and fears of its readers. "*Book of the Hopi* ," writes Geertz, "will probably continue to be a source of inspiration for thousands of Western readers to come. It obviously fulfills deep-seated Western needs

and will probably be cited as *the authority*," no matter what its shortcomings might be. Geertz can only hope that his "comments serve to show exactly why it isn't" (p. 554).

Geertz, Armin S.

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Geertz, Amin

1984 A Reed Pierced the Sky: Hopi Indian Cosmography on Third Mesa, Arizona. *Numen* 31(2):216-241.

This insightful article analyzes one of the two general categories of Hopi spatial concepts, i.e., cosmological space as revealed through mythology and the ritual space of ceremonials. The other spatial category is terrestrial space as manifested in language, village layouts, agricultural holdings, and social, political, or geographical referents. Geertz's analysis is based on data from Third Mesa.

Geertz thinks that previous characterizations of Hopi space as a bipartite system (e.g., Titiev 1956; Hieb 1979) are too simplistic. He (p. 217) thinks the Hopis divide the world in quadripartite and sexpartite units. He calls the sexpartite division (i.e., a horizontal-vertical orientation) the "Atrosphere Orientation" and considers it to be "peculiar" to Puebloan culture. The six divisions include the cardinal directions along with the zenith and nadir.

In considering the work of earlier anthropologists, Geertz (pp. 217-218) adroitly points out, "... the early ethnographic data is of varying quality depending on the researcher's knowledge of the Hopi language, and the later syntheses merely repeat the often faulty or poorly understood data of earlier studies." Geertz is particularly critical of composite myths that attempt to synthesize what are really distinct accounts of different clans (e.g. the composite accounts of Courlander [1982], Waters [1963], and James [1974]).

Geertz has found twelve versions of the Hopi "Emergence Myth" told from the perspective of Third Mesa (p. 219). He refers to the "Emergence Myth" as the "Four Worlds Cycle." In part, Geertz (p. 220) relates in these accounts that,

> ... the cane reed is the only plant strong enough to pierce the sky while still holding itself up. Upon the Emergence of Mankind from this hole, which is called the *sipaapuni* (the etymology of which is unsure, perhaps from *sipoq*, "in the womb" or *sipna*, "navel"), the cane reed is ripped up and knocked down to prevent the evil ones from following them.

Geertz (p. 221) thinks that the goal of Hopi clan migrations after emergence, as commanded by Masaw, was to explore the continent and "for each clan to test its particular cultic power."

The "Four Worlds Cycle" is considered to be an "Axial" system, with *Paaqavi*, the cane reed, being an "*Axis Mundi*," i.e., a link between the world above and the world below. Geertz notes that *Paaqavi* as an *Axis Mundi* is used in a purely functional manner in several ways that differ from its symbolic use in other religious systems. He says (p. 222), "... this *Paaqavi* is a means of transportation *for all humanity*, and not just the usual lone religious specialist. Furthermore, the Hopi version speaks of an eschatological

escape upon this Axis from one world to another as opposed to its usual use as a change of continual congress. The Hopi Axis is used only once for each world."

Geertz (p.222) points out that as soon as people emerged, the *Sipaapuni* became a "true World Center." He notes, it "... is not only a spot on the cosmic topographic map. It is also a geographical place, which lies at the bottom of the Grand Canyon (Öngtupka, 'Salt Canyon')." A second "World Center" is inherent in the "Emergence Mythology" in that Oraibi (and Hopiland) is considered to be Tuuwanasavi ("Sand-Center-Place"). In Geertz's (p. 224) words, the "Emergence Mythology also establishes "... each clan's rights to political leadership, the best property and the most lucratively placed farmlands. Thus, this mythology constitutes a cosmography, an urbanography, a sociography and a agripolitical geography." The World Center at Oraibi is anchored in the home of Masaw, the tutelary deity of the Hopi. Geertz (p. 224) points out that the two World Centers are in horizontal opposition to each other. "In other words, each center is peripheral to the other. And since Maasaw apparently dwells at both of these Centers, then He must be the epistemological link between the two."

Tuuwanasavi is contrasted by Tuuwaqalalni ("Sand Border"), i.e., "the Horizon" or "the Edge of the World" (p. 224).

Geertz (p. 225) posits that "ritual activity is enhanced and made effective through strict adherence to spatial contexts and its complementary numericals.

Geertz discusses the themes of Hopi solar mythology, which entail opposing worlds, world axis, and the world center (pp. 225-227). He also considers ceremonial integration achieved through cult ritual, ancestors, and Katsinas (p 227).

The six directions of the Atrosphere each has a corresponding chief, color, and cloud (pp. 227-229). He notes that Don Talayesva called the Chiefs "the Six-Point-Cloud-People." These spirits are departed ancestors who control rain, health, good crops, long life, drought, and famine. The Katsinas are servants who bring offerings to the Atrosphere Cloud People.

Geertz (p. 228) describes how Hopis place a cotton mask over the face of deceased people that represents the billowy clouds that will hide their face when they return to Hopiland to drop rain. He (pp., 228-229) also states,

> The spirit of the deceased, *hikwsi*, "breath," leaves the grave on the fourth day after inhumation by way of a digging stick which has been stuck into the surface of the grave for that purpose. Thus the *hikwsi* travels up a symbolic axis and is met by clouds which arrive to gather the *hikwsi* up and accompany it to Sipaapuni. the *hikwsi* then descends along the Axis through Sipaapuni to Maski ... the spirit regularly returns as a rainbearing cloud.

In drawing together his ideas, Geertz (pp. 229-230) says,

> What we find here is that the ideas concerning the Afterlife integrates and makes use of the cosmographical systems given by the Emergence Mythology, i.e., the World Axis, World Center and Opposing Worlds. Furthermore, the Ancestor ideology invests Sipaapuni with semantic dimensions other than those of cosmography. It is now the source of life-giving water and a place of eschatological importance. The eschatological importance is of another kind than that of the Emergence, i.e., that of the fate of each individual spirit.

With respect to shrine pilgrimages Geertz (pp. 230-231) says,

> Pilgrimages are made to the various ruins which Hopi Clan Migration Mythology lays claim to, and which are guarded by the above-mentioned clan ancestors. In the past, it seems, individuals from the respective clans made journeys to the former homes of their ancestors in order to keep an eye on the ruins, to keep the spirits alive as boundary guardians *and* to notify them whenever major ceremonials were to be performed at home. This peregrinal activity was effectively hindered by Navajo and other hostile tribes. In 1974, however, a group of religious leaders from Second and Third Mesa instituted a pilgrimage along the route of the most sacred clans sites which they believe mark the aboriginal boundary of Hopiland.
>
> Aside from the political motives involved, this form of ritual has once again integrated a system where the Center and Periphery are activated. Of interest here is the fact that Sipaapuni is one of the places visited as a boundary marker (at least symbolically visited, since the trail down to the Colorado River is useless now), thus emphasizing not only Hopiland as the Center but also Sipaapuni as a place on the periphery.

The spatial aspects of Hopi cosmology are manifested in architecture As Geertz (p. 233) states,

> Emphasis on the Center lies also in the village layout as well as in the architecture of the *kiva.* The village is built around an inner courtyard or plaza. In the center of the plaza is an altar, *pahoki,* "prayer stick house," for making offerings to the spirits and deities which attend the religious dances in the plaza. The *kiva,* on the other hand, is specifically patterned after Emergence ideology, where the main entrance is through the roof, an inner world which is connected by a ladder to the upperworld. The symbolism is further enhanced by the fact that most *kivas* are underground chambers. This means that the participants symbolically enter the womb of the earth whenever they descend the *kiva* ladder, a symbolism which is purposely dramatized during the all-important Wuwtsim Ceremonial.

> Each *kiva* has, as noted above, a *sipaapuni* of its own, somewhere near the center of the *kiva* floor. Offerings are placed in this hole and the spirits and deities of the Underworld are invoked through the hole.

Geertz (p. 234) points out that the concept of Tuuwanasavi and the numeral four are both closely related to the Katsina Cult. The numeral six is more closely related to the "Ceremonials." Geertz says,

> The numeral four is further accentuated by the belief that the Katsinas live at four cardinally extended homes: Nuvatukya'ovi (San Francisco Peaks) to the (south)west, Kiisiwu (a spring) to the north(east), Weenima (near Safford or Springerville) to the south(east) and Kaawestima (Betatakin Ruins) to the north. Worshippers send their representatives to these places to get spruce branches and water for ritual use during a Katsina Dance or certain Ceremonials.

Two independent "Axial-Central" systems are thus evident in Hopi culture: (1) Sipaapuni associated with Maasaw and the Ancestors; and (2) Tuuwanasavi associated with Muy'ingwa and the Katsinas (p. 234). Muy'ingwa is the "God of Germination and Growth" (p. 224).

Geertz thinks Katsinas introduced to Hopi from the Rio Grande Pueblos in relatively recent times. He says (p. 234),

> Most researchers have overlooked the ritual function of the Ancestors mainly because the greater interest has been for the Katsina Cult. This colorful Masked Dance Cult arrived in Hopiland via the Eastern Pueblos at a relatively recent time. Katsinas are associated with rain, springs and waterholes, but have a subservient role in many instances. This is so, in my opinion, because there already was a group of Beings who vouchsafed such matters, namely the Ancestors.

Geertz admits, however, that the use of the Atrosphere and cardinal spatial systems occurs in both Kachina and Ancestor worship, and the numerals four and six are also important in both systems (p. 235). Geertz thinks there are many reasons for the assimilation of multiple spatial-conceptual systems in the Hopi religion.

He concludes by noting (pp. 235-236), "The Hopi have a long religio-historical development with important influences from diverse sources. An attempt to delineate these stages is hampered by the lack of concrete evidence."

Geertz, Armin W.

1994 *The Invention of Prophecy, Continuity and Meaning in Hopi Indian Religion.* University of California Press, Berkeley.

This book entails a detailed historical analysis that documents how the Hopi people have "invented" (i.e., articulated and modified) prophecy in response to the changing socio-political context of their lives. Geertz includes four appendices that provide a bilingual version of the emergence myth, selected versions of the emergence myth by "hostiles" and "traditionalists," a catalog and typology of Hopi prophecies from 1858 to 1961, and the text of a letter to President Harry Truman from "Representatives of the Hopi Empire."

Geertz (p.3) defines a myth to be a "... narrated tradition that codifies, coordinates, and sometimes systematizes interpretive frameworks and categories in terms of stories about beings and events that are of primary significance to a given culture."

Hopi emergence mythology is (p. 70)

> ... a depiction of a series of events which repeat themselves through four world ages. Each world begins more or less as a paradise that slowly and inevitably becomes disrupted through human inequity. Each world is destroyed by natural catastrophe, thus forcing the faithful to climb up to the next world level, the fundament of which is the sky of the lower level. Through the forced magical growth of a giant reed, the faithful create a means of transportation—an eschatological escape on an *axis mundi* ... and being life anew at the next level. The life in the present fourth world has already become disrupted and will end in a manner similar to the primordial catastrophes. Thus, the very framework of the narrative is apocalyptic, i.e., it begins and ends with collective destruction.

In this book, Geertz (p. 4) argues that (1) Hopi prophecy is indigenous and derives from the core narrative of the emergence myth which is both stable and changing, and (2) the rhetoric of traditionalism is not equivalent to the reality it portrays. Geertz views "tradition" as a strategic resource for all members of Hopi society.

Geertz (p. 9) thinks the meaning of the Hopi term "*wimi*" comes close to that of the English term "religion." *Wimi* is used to designate ceremonials, ritual objects, and the knowledge, songs, and traditions about them.

As Geertz observes (p. 16), the last century of writing about Hopi has produced a "jungle of mutually exclusive orthographies and long traditions of misspellings." Geertz makes no attempt to correct inconsistencies and retains words as they are spelled in quoted settings.

Geertz (p. 81) notes the Siaapuni is "... the place of emergence which Hopis locate geographically in one of the side canyons on the Grand Canyon system."

During the Wuwtsim ceremonial, Kwan members perform a song in which Hopi leaders are described as being gathered around the Sipaapuni (which Geertz notes has a symbolic counterpart in every kiva) engaged in beginning life anew.

Geertz describes what happens when oral traditions are written down. He says (pp. 96-97),

> ... the oral traditions have become frozen into texts that have carried them beyond the reach, understanding, and control of their producers. This circumstance has led to two main consequences: 1) What was once a body of knowledge restricted to more-or-less formalized and ritualized contexts has now, especially with the use of mass media, been made accessible to a broader public—not only to a Hopi public, but more importantly and especially to the Euro-American public. Contrary to stereotypical expectations about the stabilizing effects of the printed word, the enlarged audience has actively stimulated a formerly restricted dialogue. 2) the publication of Hopi prophecies has indeed invited contention since it has left indelible proof that the prophecies and their exegesis have constantly changed.

Geertz (p. 168) observes that "Ritual objects and ritual behavior are central to Hopi hegemony ..." He argues (p. 169) that "religious as well as secular power resides almost completely in the possession and use of important ritual objects." Geertz adds (p. 169),

> Hopi ritual objects materialize the power of secret knowledge, providing it with an iconographic medium that expresses the ineffable in the world of objects, but which, even more importantly, gives actual physical substance tot he "property" aspect of secret knowledge. Thus, the possession of these objects is, in actual fact, the possession of social, political, and religious power. The only ones who ideally possess the "meaning" of any particular ritual object are its legitimate owners.

Apoonivi is described as the place of judgment for individual souls on their way to the afterlife in the underworld (p. 239).

Geertz's analysis of the Hopi explanations of "Prophecy Rock" demonstrate the mutability of interpretation of petroglyphs (pp. 257-287).

Even though is great diversity in Hopi clan migration legends, Geertz points out there are also many continuities, i.e, (1) all the clans spread out after emergence to find their final residence and to fulfill their destiny, (2) each clan established reciprocal relationships with specific geographical locations and with certain human and non-human beings, (3) there was a standard procedure for admittance into a village, and (4) there is agreement that the relationships to places and beings and the order of arrival determined contemporary social, political, and religious order.

In a letter from the "Representatives of the Hopi Empire" to President Harry Truman in 1949 (pp. 441-446), it is stated, "This land is a sacred home to the Hopi people ... Our flag still flies throughout our land (our ancient ruins)."

Geertz, Armin W. and Michael Lomatuway'ma

1987 *Children of Cottonwood, Piety and Ceremonialism in Hopi Indian Puppetry.* University of Nebraska Press, Lincoln.

The introduction to this book includes an insightful review of the published literature on Hopi (pp. 6-11). Geertz and Lomatuway'ma describe the difficulty in using narratives of traditional history that have been recorded or translated in English and are presented out of context. They state (p. 9),

> It is difficult to use Hopi mythology *as it is* to try and understand Hopi religious mentality. There are many questions which have not, as of yet, been answered. We do not know why certain myths are told, when they are told, where they are told, to whom they are told, or how they are told. We know that there are specific categories of narratives all of which have their time, place, and function. They life-setting is still unclear.

With respect *Sun Chief,* Geertz and Lomatuway'ma note that Talayesva was paid by the page (p. 10). They assert that Talayesva consequently plagiarized Voth and Dorsey and also produced a number of "doubtful" statements. Nonetheless, Geertz and Lomatuway'ma think *Sun Chief* has "countless strengths" and is a very influential book in the literature on Hopi.

In the context of discussing Hopi marriage and wedding rituals (pp. 181-189), Geertz and Lomatuway'ma note that wedding garments are necessary for the woman's journey to the underworld after death. Some souls have to pay for their misdeeds on earth when the travel to the underworld. Some misdeeds are committed by people who misused religious responsibilities to hurt other people. Other misdeeds concerns concern women who have not received their wedding garments or who received wedding garments that were made incorrectly. Geertz and Lomatuway'ma (p. 187) state,

> It seems that, somewhere along the path which the dead travel, there is a large house which is occupied by the Kookopngyam, who are phratry brothers to the Maasaw Clan. Here is where all wedding garments end up. The house is filled with robes, gowns, shoes, and belts hanging all over the place. The unfortunate woman who does not own such garments is forced to grind corn all over again in this house ... Other sources stress that the robe carries the deceased swiftly to her destination and helps her float down to the bottom of the Grand Canyon where the entrance to the Underworld lies. It should be noted that the above mentioned wicker placque, which is made for the groom as repayment, has similar functions. This placque, which is called *hahawpi*, "instrument of descending," is specially designed and assures his swift and safe journey down to Sipaapuni and below. Thus the accourtrements of the marriage ceremony have direct influence on the individual eschatology of the man as well as of the woman.

Gilbert, Bil

1983 *Westering Man: The Life of Joseph Walker.* Antheneum, New York.

Gilbert's biographical work on the western tradesman Joseph Walker, provides useful information about peoples and places in the nineteenth-century West. Regarding the Hopi, Gilbert makes the general statement: "From the days of the first Taos trappers the mountain men had had occasional dealings with the Moqui" (p. 237).

More specifically, Gilbert recounts the story of one of Walker's visits to the Hopi in 1851. Gilbert's information comes from an article in the *San Francisco Herald* which an unnamed journalist wrote after interviewing Walker. According to the interview, Walker's stay among the Hopi occurred during a private exploration of a route "between Los Angeles and the Santa Fe-Albuquerque area." Previously, Walker had traveled portions of this route, "but had never made a single traverse between the Colorado and Rio Grande" (p. 237). Walker mentioned to the reporter that during his exploration he stayed with the Hopi for a week.

Walker also told the journalist that he had visited the Hopi prior to this encounter. He claimed that during his previous meetings he had, "thought them [the Hopi] exceptionally interesting and wanted to become better acquainted" (p. 237). In 1851, Walker took the opportunity to follow up on this ambition.

While at the Mesas, Walker learned some marginally interesting information about the Hopi, but reported nothing relating to their ties to the Grand Canyon (p. 239).

Gregory, Herbert E.

1917 *Geology of the Navajo Country, A Reconnaissance of Parts of Arizona, New Mexico, and Utah.* United States Geological Survey, Professional Paper 93. Washington: Government Printing Office.

In a section on economic geology, Gregory makes the following observation:

> No deposits of salt of commercial value are known within the limits of the Navajo Reservation. Small amounts of salt are commonly found in this region, however, particularly in strata of Permian (?) age, and the water from wells at Adamana and other points along the railway and also from certain springs in the Moenkopi formation is so highly charged with saline matter as to be unfit for use. Before the establishment of trading posts, the Hopis obtained salt from the 'salt spring' near Winslow (Sunset Crossing), on the Little Colorado, and from Zuni Salt Lake. A chemical analysis of the evaporation residue of the brine at Winslow gave the following result:
>
> | | |
> |---|---|
> | Chloride of sodium | 78.79% |
> | Chloride of calcium | 5.48% |
> | Chloride of magnesium | 12.16% |
> | Sulphate of lime | 3.07% |
> | Traces of alumina, oxide of iron, and loss | 0.50% |

Plate II, "Geologic Map of the Navajo Country, Arizona, New Mexico, and Utah," shows many trails and roads in the Hopi area. One route leads to Salt Canyon off the Little Colorado River. This route departs from Oraibi and runs westward, passing to the south of Solomi Spring and the north of Howell Mesa, entering Moencopi Village from the south. This route then runs northwestward by Moa Ave and Willow Springs, and thence to Bodaway Mesa.

Hague, Harlan

1978 *The Road to California: The Search for a Southern Overland Route, 1540-1848.* The Authur H. Clark Co., Glendale, CA.

In this book, Hague reconstructs the three-century long search for a southern overland route to California. He includes a information about explorers who intersected the Hopi Mesas along their journeys to the coast.

One of the most important contributions Hague makes to the documenting of Hopi knowledge of the Grand Canyon, concerns Silvestre Velez de Escalante. Hague comments that Escalante had tried to open a route to California by following the Colorado River, which he called "the great river of the Cosninas," (p. 73). Escalante probably learned that the Colorado River flowed into California from either the Hopis or Zunis.

Hamana, Walter

n.d. Comments on Rainbow Bridge Development. Ms. on file at Hopi Cultural Preservation Office, Kykotsmovi, Arizona.

These comments, prepared in response to a National Park Service planning document, attest to the continuing cultural significance the Rainbow Bridge has for the Hopi people. Hamana says,

> Rainbow Bridge is culturally significant to the Hopi people. It is recognized as one of the respected places because it has a religious significance to the tribe ... clan affiliation identified the area as part of the Hopi aboriginal land boundaries ... Up through today Hopi ceremonial influence is maturelly (sic) recognized and practiced.

Hamana documents that Hopis are concerned about important plants, cultural materials, and prehistoric archaeological sites near Rainbow Bridge.

Hammond, George P. and Agapito Rey

1940 *Narratives of the Coronado Expedition, 1540-1542,* Coronado Cuarto Centennial Publications, 1540-1940, vol. II. University of New Mexico Press, Albuquerque.

This volume contains an Introduction and an assortment of primary documents relating to the events of the Spanish expedition under Francisco Vázquez de Coronado. Included in the collection of primary sources are official records, numerous letters written by Coronado, testimonies from trials of misconduct after the expedition, and, most importantly, a translation of the chronicles of Castañeda (pp. 191-283).

Chapter XI of *Castañeda's History of the Expedition* (pp. 213-17) recounts the events of Pedro de Tovar and García López de Cárdenas among the Hopi. Castañeda describes how Tovar and a party of twenty one men traveled to the Hopi Mesas and learned of "a large river" (p. 215) while they were there. According to Castañeda, Tovar's report initiated Coronado's decision to send a party of about twelve men under the leadership of Cárdenas to investigate the existence of such a river.

Cárdenas and his men were well received at Hopi. Castañeda (pp. 215-216) wrote the Hopis,

> ... provided him with guides to proceed on his journey. They set out from there laden with provisions, because they had to travel over some uninhabited land before coming to settlements, which the Indians said were more than twenty days away. Accordingly when they had marched for twenty days they came to the gorges of the river, from the edge of which it looked as if the opposite side must have been more than three or four leagues away by air. This region was high and covered with low and twisted pine trees; it was extremely cold, being open to the north, so that, although this was the warm season, no one could live in this canyon because of the cold.
>
> The men spent three days looking for a way down to the river; from the top is looked as if the water were a fathom across. But, according to the information supplied by the Indians, it must have been half a league wide. The descent was almost impossible, but, after these three days, at a place which seemed less difficult, Captain Melgosa, a certain Juan Galeras, and another companion, being the most agile, began to go down. They continued descending within the view of those on top until they lost sight of them, as they could not be seen from the top. They returned about four o'clock in the afternoon, as they could not reach the bottom because of the many obstacles they met, for what from the top seemed easy, was not so; on the contrary, it was rough and difficult. They said that they had gone down one-third of the distance and that, from the point they had reached, the river seemed very large, and that, from what they saw, the width given by the Indians was correct. From the top they could make out, apart from

> the canyon, some small boulders which seemed to be as high as a man. Those who went down and who reached them swore that they were taller than the great tower of Seville.
>
> The party did not continue farther up the canyon of the river because of the lack of water. Up to that time they had gone one or two leagues inland in search of water every afternoon. When they had traveled four additional days the guides said it was impossible to go on because no water would be found for three or four days, that when they themselves traveled through that land they took along women who brought water in gourds, that in those trips they buried the gourds of water for the return trip, and that they traveled in one day a distance that took us two days.

On the return to the Hopi Mesas, the Spaniards learned from the guides of natural salt deposits which were probably located in the Little Colorado River Valley (pp. 216-217). Castañeda reports that on the way back to Zuni, the Spaniards "saw a waterfall which came down a rock. They learned from the guides that some clusters which hung like fine crystals were salt. They went thither and gathered quantities of it which they brought and distributed when they returned to Cibola."

Hammond, George P. and Agapito Rey

1940 *Narratives of the Coronado Expedition, 1540-1542,* Coronado Cuarto Centennial Publications, 1540-1940, vol. II. University of New Mexico Press, Albuquerque.

This volume contains an Introduction and an assortment of primary documents relating to the events of the Spanish expedition under Francisco Vázquez de Coronado. Included in the collection of primary sources are official records, numerous letters written by Coronado, testimonies from trials of misconduct after the expedition, and, most importantly, a translation of the chronicles of Castañeda (pp. 191-283).

Chapter XI of *Castañeda's History of the Expedition* (pp. 213-17) recounts the events of Pedro de Tovar and García López de Cárdenas among the Hopi. Castañeda describes how Tovar and a party of twenty one soldiers and priest left Hawikku and traveled to the Hopi Mesas where they learned of "a large river" (pp. 214-215).

According to Castañeda, Tovar's report upon his return to Cibola initiated Coronado's decision to send a party under the leadership of Cárdenas to investigate the existence of such a river. Castañeda's chronicle describes how the Hopis assisted Cárdenas' exploration of the territory west of Hopi (pp. 215-217). It states,

> They provided him with guides to proceed on his journey. They set out from there laden with provisions, because they had to travel over some uninhabited land before coming to settlements, which the Indians said were more than twenty days away. Accordingly when they had marched for twenty days they came to the gorges of the river, from the edge of which it looked as if the opposite side must have been more than three of four leagues away by air. This region was high and covered with low and twisted pine trees; it was extremely cold, being open to the north, so that although this was the warm season, no one could live in this canyon because of the cold.
>
> The men spent three days looking for a way down to the river; from the top it looked as if the water were a fathom across. But, according to the information supplied by the Indians, it must have been half a league wide. The descent was almost impossible, but, after these three days, at a place which seemed less difficult, Captain Melgosa, a certain Juan Galeras, and another companion, being the most agile, began to go down. They continued descending within the view of those on top until they lost sight of them, as they could not be seen from the top. They returned about four o'clock in the afternoon, as they could not reach the bottom because of the many obstacles they met, for what from the top seemed easy, was not so; on the contrary, it was rough and difficult. They said that they had gone down one-third of the distance and that, from the point they had reached, the river seemed very large, and that, from what they saw the width given by the Indians was correct. From the top they could make out, apart from

> the canyon, some small boulders which seemed to be as high as a man. Those who went down and who reached them swore that they were taller than the great tower of Seville.
>
> The party did not continue farther up the canyon of the river because of the lack of water. Up to that time they had gone one or two leagues inland in search of water every afternoon. When they had traveled four additional days the guides said that it was impossible to go on because no water would be found for three or four days, that when they themselves traveled through that land they took along women who brought water in gourds, that in those trips they buried gourds of water for the return trip, and that they traveled in one day a distance that took us two days.
>
> This was the Tizón river, much closer to its source than where Mechior Díaz and his men had crossed it. These Indians were of the same type, as it appeared later. From there Cárdenas and his men turned back, as that trip brought no other results. On the way they saw a waterfall which came down a rock. They learned from the guides that some clusters which hung like fine crystals were salt. They went thither and gathered quantities of it which they brought and distributed when they returned to Cibola. Here they rendered their general a written report of what they had seen ... They left the pueblos of that province in peace and never visited them again, nor did they seek or make attempts to locate other settlements in that region.

Another account of the Spaniard's journey to the Grand Canyon is provided in the "Relacion del Suceso," written in 1541. Here it is documented that upon hearing Tovar's report of the initial Spanish visit to the Hopi pueblos, Coronado immediately sent Don García López de Cárdenas, maestre de campo, to explore the country west of Tuzán (the Tusayan of Castañeda). Cárdenas was allotted eighty days for the round trip. He went of Tuzán with Hopi guides who said the settlements in that direction were located far away. The Relacion states (p. 287),

> After going fifty leagues west from Tuzán, and eighty from Cíbola, he came to the canyon of a river where it was utterly impossible to find a way down, either for horses or on foot, except at a very difficult descent where it was almost two leagues down. The canyon was so lined with rock that one could hardly see the river, although it is said to be as large or much larger than the one at Seville. From the top it looked like an arroyo. Although the men sought diligently in many places for a crossing, none was found.
>
> Here they spent a good number of days, suffering from lack of water which they could not obtain even though they had the river before their eyes. For this reason Don García López was compelled to go back until they found some. This river flows from the northeast and turns southwest, so it can not fail to be the one reached by Mechior Díaz.

In the introduction to this book, Hammond and Rey note that Cárdenas and his men "discovered" the Grand Canyon and were thus the first Europeans to "... gaze upon this tremendous gorge, appalling in its solitude and awful majesty."

Hammond, George P. and Agapito Rey

1940 *Narratives of the Coronado Expedition, 1540-1542.* Coronado Cuarto Centennial Publications, 1540-1940, vol. ii. Albuquerque: University of New Mexico Press.

This volume of the Coronado Cuarto Centennial Publications series contains an Introduction and an assortment of primary documents relating to the events of the Spanish expedition under Francisco Vazquez de Coronado. Included in the collection of primary sources are official records, numerous letters written by Coronado, testimonies from trials of misconduct after the expedition, and, most importantly, a translation of the chronicles of Castaneda (pp. 191-283).

Chapter XI of *Castaneda's History of the Expedition* (pp. 213-17) recounts the events of Pedro de Tovar and Garcia Lopez de Cardenas among the Hopi. Castaneda describes how Tovar and a party of twenty one men traveled to the Hopi Mesas and learned of "a large river (p. 215)" while they were there. According to Castaneda, Tovar's report initiated Coronado's decision to send a party under the leadership of Cardenas to investigate the existence of such a river.

While exploring what turned out to be the Grand Canyon of the Colorado River, the Cardenas party employed Hopis as guides. The Spaniards learned from these guides of natural salt deposits which were probably located in the Little Colorado River Valley (p. 216). Castaneda reports that on the way back to Zuni, the Spaniards "saw a waterfall which came down a rock. They learned from the guides that some clusters which hung like fine crystals were salt."

Castaneda's History also includes important comments by the guides which reveal that Hopis had a developed system of travel in the region of the Grand Canyon. For instance, Castaneda reports that the Cardenas expedition turned back after (p. 216):

> the guides said that it was impossible to go on because no water would be found for three or four days, that when they themselves traveled through that land they took along women who brought water in gourds, that in those trips they buried the gourds of water for the return trip, and that they traveled in one day a distance that took us [the Spaniards] two days.

Hammond, George P. and Agapito Rey

1966 *The Rediscovery of New Mexico, 1580-1594: The Explorations of Chamuscado, Espejo, Castano de Sosa, Morlete, and Leyuva de Bonilla and Humana,* Coronado Cuarto Centennial Publications, 1540-1940, vol. iii. Albuquerque: University of New Mexico Press.

This volume of the Coronado Cuarto Centennial Publications series focuses on the explorations of the New Mexican region in the late sixteenth century. Included in the collection of exploration accounts is the journal of one, Diego Perez de Luxan who accompanied Antonio de Espejo on his official expedition into the region. The editors of the volume, Hammond and Rey, give a summary of this expedition in the Introduction and provide an English translation of Luxan's original journal in Part II of the main text (pp. 153-212). There are also translations of official correspondence between Espejo and the royal government, both in Spain and Mexico.

Luxan describes in his account the interaction between Hopi and the Espejo Expedition at the Hopi villages in 1583. He reports that at Awatovi, Walpi, Shongopovi, Mishongnovi, and Oraibi, the Hopis treated their visitors graciously. At Oraibi, the Spaniards learned from the Hopis of silver mines far away from the Mesas. Hopi guides accompanied the explorers to investigate these mines (pp. 193, 195). The mines proved to be disappointing to the Spaniards because they contained copper, not silver; nonetheless, the Hopis' knowledge of the metal deposit at a great distance from their villages suggests familiarity with an extensive portion of the Grand Canyon region.

Hardeen, George

1990 Petroglyph Vandalized. *Arizona Daily Sun*, June 4, 1990, p. 1.

This newspaper article reports recent vandalism at Tutuvehni, a petroglyph site near Willow Springs. New graffiti two feet high and nine feet long was spray painted over some of the oldest Hopi clan symbols at the site. Hardeen reports that "News of the defacement saddened Hopi officials and rock art experts who know the site." Leigh Jenkins, the Hopi Cultural Preservation Office, reports that the site has been previously vandalized. He notes "It's a very significant place to the Hopi."

Harvey, Byron

1970 *Ritual in Pueblo Art, Hopi Life in Hopi Painting.* Contributions from the Museum of the American Indian, Heye Foundation, Vol. XXIV.

Harvey commissioned a corpus of 270 paintings to illustrate various aspects of Hopi life. The Hopi artists included Marshall Lomakema, Arlo Nuvayouma, Narron Lomayaktewa, Leroy Kewanyama, and Melvin Nuvayouma.

Two paintings by Marshall Lomakema (70-71) illustrate the "Salt Journey." The first painting is titled, "A Salt Expedition: Gift for an Aunt." Harvey's explanatory narrative says (p. 35-36),

> Salt getting has been infrequent since 1940, but one man went to Zuni in the early 1950s. Although the Second Mesa villagers originally traveled either to Zuni or the Grand Canyon to get salt, traditions state the original mine was located eight miles south of the village (Shungopavi) at *Hukyatwi* or just below the village where an alkali (*siönga*) deposit is now found. The people's greed was believed to cause the mine to "move" to the Zuni area.
>
> In the illustration, a man (left) brings salt to his aunt. He carries a handwoven bag full of salt over his right shoulder and the short digging stick used at the mining site. The aunt, in red and white *manta*, prepares to offer cornmeal from a small bowl. The salt miner himself wears a black blanket and an eagle feather tied to his hair.

The artist Lomakema describes this painting by saying (p.35),

> Early in the morning they come back from the south. They build a fire way over at the mountain. Then they build a second one and keep coming closer. They have to stay about two miles away from the village. They stay there one night. In the early morning, they come over and their aunts meet them at the trail. They go after their aunts to their aunt's house.

The second painting is titled, "Smoking over the Gift of Salt." Harvey's narrative states,

> At the aunt's home two men smoke over the salt or "on the salt." The first man smokes over a pile of salt while the second waits for the pipe. After smoking, the miner will recount his adventures in getting the salt in a speech comparable to other formal Pueblo ritual reports.

Hermequaftewa, Andrew
1953 *The Hopi Way of Life is the Way of Peace.* Santa Fe, NM: Hopi Friendship Association.

This seven page pamphlet is a transcription of a statement by Andrew Hermequaftewa tape recorded by Dr. Thomas Noble of Indianapolis; Mr. Merideth Guilet, Superintendent of Walnut Canyon National Monument; and Platt Cline, Secretary of the Arizona Commission of Indian Affairs, with Thomas Banyacya of Oraibi as interpreter. Hermequaftewa was the "Bluebird Chief" of the village of Shungopavi. In his statement, Hermequaftewa reviews Hopi traditional history and cultural values as an entreaty to Congressional leaders in Washington to have more respect for the Hopi way of life. The pamphlet contains the following information pertinent to Hopi use of and reverence for the land that is relevant to the GCES issues.

After describing how the Hopi people were saved from the previous, corrupt world, Hermequaftewa (pp. 1-2) explains the commitment the Hopi people made to Maasau to take care of the world. In his words,

> After many days with Him, time came for all of the first Hopi to move out onto the face of this land. Maasau gathered us all about Him on that day and gave us instructions as to the obligations He placed upon us. He provided us with many altars and many emblems which, with us, are to represent the land and the people. These He placed in the hands of our leaders through whom we follow this new life.

Hermequaftewa described the migrations that lead to the establishment of Shungopavi as the Hopi "mother village (pp. 2-4). He pointed out that (p. 4),

> Nothing happened by chance. Everything was according to the dictates of Maasau. Village life was established, leaders were appointed, and different clans were given special duties. The land was being taken care of under the obligations of Maasau.
>
> Our religious teachings are based upon the proper care of our land and the people who live upon it. We must not lose the way of life of our religion if we are to remain Hopis ...

Hermequaftewa (p. 5) described the tie between the Hopi religion and land by stating,

> The Hopi land is the Hopi religion. The Hopi religion is bound up in the Hopi land ... The Hopi lives and protects his land by worshipping, by praying, by fasting, according to the plans and instructions of Maasau.

Hermequaftewa (p. 5) suggested that "The white man should go to the proper Hopi leaders in all fairness and learn of the instructions from Maasau." He (p. 6) states,

> Many Hopi today, are disturbed and confused. It seems to them the white man disregards his promises and his agreements under which the Hopi land was set aside. The white man boasts he has full authority and power to do the things he wants to do. The teachings of the Great Maasau are the right way, for us; and we believe the United States government will see that if we have council. We know that if the right way is not followed, great evil will come to this land.

Hieb, Louis A.

1977 "The Hopi Traditionalist Movement, A Documentary History, 1948-1971." Unpublished ms. in Special Collections, MS84.3, Manuscript Collection #245, Material documenting the history of the Hopi Traditionalist Movement. Northern Arizona University, Cline Library, Flagstaff, Arizona.

This manuscript is a compilation of letters, statements, newspaper articles, and other documents pertaining to the "Hopi Traditionalist Movement." A total of 84 documents, encompassing 211 pages, are listed in a table of contents. These documents span a period from 1880 to 1971. Some documents are transcribed as typescripts (and contain typographical errors), others are actual copies of original documents. Most of the documents are by Hopis or government officials, but there are also a few testimonials from non-Hopis. Issues covered by the documents include establishment of the Hopi Reservation, Hopi-Navajo land disputes, services of the tribal land claims attorney, authority of IRA government (Tribal Council), mineral development, and Hopi religion, prophesy, and philosophy.

The manuscript was perused to search for information pertinent to GCES. This information is presented below. The manuscript also contains much information on many other topics of interest in Hopi history.

Letter from Talahaftewa et al. to President of the United States, March 28,1949.

This letter, with a return address of "Hopi Indian Empire, Oraibi, Arizona," was signed by the "hereditary Hopi Chieftains of the Hopi Pueblos of Hotevilla, Shungopovy, and Mushongnovi" and contains a list of twenty other Hopis who supported the statement. The principals included, from Shungopavi: Chief Talahaftewa, Village Chief, Bear Clan; Basevaya, Advisor Katchina Clan; Andrew Hermequaftewa, Advisor, Blue Bird Clan; from Mushgonovi: Chief Sackmasa, Village Crier, Coyote Clan; from Hotevilla: Chief James Pongayawyma, Village Chief, Kokop Clan (Fire); Chief Dan Katchongva, Advisor, Co-ruler, Sun Clan.

The traditional leaders met on March 9, 13, 26, and 28, 1949, to consider land issues.

"The divine plan of life in this land was laid out by great Spirit, Masau'u. This plan cannot be changed."

"This land is a sacred home of the Hopi people and all the Indian Race in this land. It was given to the Hopi people the task to guard this land not by force of arms, not by killing, not by confiscating of properties of others, but by humble prayers, by obedience to our traditional and religious instructions and by being faithful to our Great Spirit Masau'u. We are still a sovereign nation. Our flag still flies throughout our land (our ancient ruins)."

"Pottery Chips" from Oraibi, Hopi Independent Nation. Contributed by Thomas Banyacya, Interpreter for Hopi Leaders, August 21, 1966.

"The Instructions the Great Spirit gave us pertain to four general categories, (1) food, (2) language, (3) religious ceremonies, and (4) land."

"A few of the basic Instructions pertaining to land specified that we must thoroughly explore, (2) convincingly claim and (3) efficiently and properly use this land."

"To 'Convincingly Claim' this land, two of the many Instructions specified (1) leave permanent foot-prints (and other marks) where we explored as proof that we were here first -- First after the Great Spirit, that is, for His permanent footprints were laid down first and some of them are still known and plainly visible, (2) under certain circumstances leave pieces of broken pottery as evidence or proof that we were here first."

"Some of the permanent 'Footprints' left as evidence of valid land claims by America's first explorers can be found in the picture crafts or petroglyphs scattered at strategic locations from the mouth of the Yukon River to Tierra de Fuego ..."

"Statement of Hopi Religious Leaders." Exhibit A to Starlie Lomayaktewa v. Rogers C. B. Morton and Peabody Coal Company, "Complaint for Declaratory Relief and to Set Aside Agency Action," filed May 14, 1971. Statement signed by Starlie Lomayaktewa, Kikmongwi of Mishongnovi; Mina Lansa, Kikmongwi of Oraibi, Kyakotmovi and Lower Moenkopi; Ned Nayatewa, Kikmongwi of First Mesa; Claude Kewanyama, Kikmongwi of Shungopari and Sipaulovi; Jack Pongayesvla; Thomas Banyacya, Official Interpreter, Village of Kykotsmovi; David Monoagy, Religious Leaders of Hotevilla.

Excepts:

"Hopi land is held in trust in a spiritual way for the Great Spirit, Massau'u. Sacred Hopi ruins are planted all over the Four Corners area, including Black Mesa."

"The area we call 'Tukunavi' (which includes Black Mesa) is part of heart of our Mother Earth. Within this heart, the Hopi has left his seal by leaving religious items and clan markings and plantings and ancient burial grounds as his landmarks and shrines and as his directions to others that this land is his. The ruins are the Hopi's landmark. Only the Hopi will know what is here for him to identify -- others will not know."

"This land was granted to the Hopi by a power greater than man can explain. Title is invested in the whole make-up of Hopi life. Everything is dependent upon it. The land is sacred and if the land is abused, the sacredness of Hopi life will disappear and all other life as well."

"The Hopi were given special guidance in caring for our sacred lands so as not to disrupt the fragile harmony that holds things together."

"Hopi clans have traveled all over the Black Mesa area leaving our sacred shrines, ruins, burial grounds and prayer feathers behind. Today, our sacred ceremonies, during which we pray for such things as rain, good crops, and a long and good life, depend on spiritual contact with these forces left behind on Black Mesa. Our prayers, songs, ceremonies, and rituals draw their strength and vitality from the spiritual forces left by our ancestors. Each

year, after our ceremonies in the Kiva of each village, Hopi messengers carry our sacred prayer feathers and cornmeal and plant them at these spiritual places and shrines. This is our contact with the spirit, people who are our ancestors who lived and traveled in these areas. The purpose is to bring rain so that our crops will grow. If these places are disturbed or destroyed, our prayers and ceremonies will lose their force and a great calamity will befall not only the Hopi, but all of mankind."

"Hopis are the caretakers for all the world, for all mankind ... By caring for these lands in the Hopi way, in accordance with instructions from the Great Spirit, we keep the rest of the world in balance."

"Eagle shrines are located throughout the Black Mesa area. The prayer feathers that are so essential to our religious life and all our ceremonies must be Eagle feathers. Without them, we cannot place and carry our sacred messages to the spiritual world, we cannot hold the land for the Great Spirit. If the eagles are forced to flee the heart of our Mother Earth because of man's activity, it will no longer be possible for us to live in our spiritual and religious way. The life of all people as well as animal and plant life depend on the Hopi spiritual prayers and song. The world will end in doom."

"Water under the ground has much to do with rain clouds. Everything depends upon the proper balance being maintained. The water under the ground acts as a magnet attracting rain from clouds; and the rain in the clouds also acts as a magnet raising the water table under the ground to the roots of our crops and plants. Drawing huge amounts of water from beneath Black Mesa in connection with the strip-mining will destroy the harmony, throw everything we have strived to maintain out of kilter. Should this happen, our lands will shake like the Hopi rattle; land will sink, land will dry up. Rains will be barred by unseen forces because we Hopis have failed to protect the land given to us, as we were instructed. Plants will not grow, our corn will not yield and animals will die. When the corn will not grow, we will die; not only the Hopis but all will disintegrate to nothing."

"We the Hopi religious leaders, have watched as the white man has destroyed his lands, his water and his air. The white man has made it harder and harder for us to maintain our traditional ways and religious life."

Hieb, Louis A.

1994 Hopi Thought and Archaeological Theory: The Sipapu Reconsidered. *American Indian Religions* 1(1):17-36.

Hieb uses a structural paradigm to discuss the evolution of prehistoric Pueblo religion. He identifies four basic religious concepts using ethnographic information and then looks for the architectural correlates of the these concepts in the archaeological record.

Hieb (pp. 19-27) posits that the elementary structure of Pueblo religion includes four basic concepts: (1) a universe divided between an Upper World of the living and a Lower World of the spirits or dead; (2) the sipapu, a channel of communication and exchange between the Upper and Lower Worlds; (3) the concept of reciprocity wherein prayers and prayer offerings are made to the spirits of the Lower World who are obligated to respond with gifts, the most important of which is moisture; and (4) religious specialists or priests who mediate between the occupants of the Upper and Lower Worlds.

Hieb (p. 20) notes, "This world and the world of the spirits are transformations of each other and yet are of the same essential substance." Citing Stephen (1936:826), Hieb describes how the breath body of the dead travels to the sipapu in west, and how the spirits of the dead return to this world as katsinas. Katsinas take on cloud form and their substance is manifested as rainfall. Hieb (p.24) says, "As 'messengers of the gods,' the katsinas come to the Upper World to receive prayers and prayer offerings and to reciprocate with assurance and gifts of food."

The sipapu is a symbol of the place of emergence, and also serves as a fundamental channel of communication of exchange (pp. 21-22). It is represented architecturally by a hole in the floor of the kiva. Hieb (p. 25) notes there are two types of Hopi religious specialists: masked and unmasked, which represent this-worldly and other-worldly, or addressers and addressees. In Hieb's (p. 25-26) words, "Hopi religion—world view, ritual action, religious specialists and architectural form—involves communication (prayers) and exchange (prayer offerings [gifts]) for the mutual benefit of those living in this world and the spirits of the other world." Hieb (pp. 26-27) considers the sipapu to be the "most fundamental of all Hopi architectural expressions," with the kiva to be a further architectural elaboration of the concept.

In a speculative reconstruction, Hieb (pp. 27-28) thinks it is reasonable to postulate that the religion of the Pueblo peoples predates their arrival in the Southwest. He thinks the presence of sipapus in Basketmaker pithouses indicates there is a great continuity in concepts of ritual communication and exchange. Hieb admits the content of the ritual messages communicated to spiritual beings may have changed as the prehistoric economy shifted from hunting and gathering to agriculture.

The concept of the otherworldly spirits is ancient, although their representation as masked katsinas occurred ca. AD 1275-1350. Hieb (pp. 29-30) notes,

> However, we should not assume that the 13th century katsina is identical to the katsina we know from the 19th and 20th century documentation, a katsina who uses a wide range of expressive media (codes)—smoking, song, gesture, dance step, and choreography, verbal and visual metaphor—to convey its message. It is important to separate, analytically, the concept of katsina from the ritual representation of this person, and further, to recognize that the social organization of this representation in ritual may have taken many different forms, some variety of which is represented among Puebloan communities today.

Hieb (p. 31) thinks the answer to Watson Smith's classic question "When is a kiva?" is that "... a kiva is a kiva when it includes a sipaapuni."

Hieb concludes by suggesting that the diffusionist and social integrationist theories of contemporary archaeologists (e.g., Adams and Lekson) are less adequate than an explanatory model that addresses the degree of correspondence between the structure and logic of Hopi religion with the sequential appearance of the elements of this system (i.e., the architectural sipapu and masked katsinas). Hieb (pp. 32-33) says,

> ... the appearance of the katsina ... is the logical extension of a basic premise in Hopi/Puebloan religion—a balancing of the symbolic equation—and can be accounted for in this manner without talking about social integration, diffusion, or any other factors external to the religious symbol system itself. We will never know, with certainty, what spark of human creativity resulted in the mask, that *other* face, as an expression of otherworldly presence. Why deny the possibility that verbal images of the spirit world—of the "beautiful creatures "living there—were transformed into visual images—masks?
>
> The sipapu—as channel of communication and exchange—is the ancient and central symbol and elementary structure of this religious system.

Hieb, Louis A.

1994 Hopi. In *Native America in the Twentieth Century, An Encyclopedia,* edited by Mary B. Davis, pp.-240-243. Garland Press, New York.

This encyclopedia entry provides a concise overview of Hopi history in the twentieth century.

Hieb notes (p. 241),

> In a document entitled *Hopi-Tunat'ya/Hopi Comprehensive Plan*, published in 1987, the Tribal Council spoke to the issue of cultural resources by noting that "The Hopi way is a living tradition that shapes every aspect of the lives of the Hopi people," and included among its goals the preservation of the Hopi way and the protection of sacred places and subsistence gathering areas.

Hieb also observes (p. 242),

> Hopi cosmology includes the notion of the evolution of mankind through four worlds, with final emergence of the Hopi in the Grand Canyon, by way of the *sipapu*, or opening from the underworld below. In Hopi thought the architecture of the kiva—through the *sipapu*, an opening in the floor, and the levels of the floors—replicated this account. The ladders, which stood against the first floor exterior of the traditional *kihu*, or extended above the entrance into the kiva, reminded Hopis of the trees they climbed at the emergence. For Hopis, the *sipapu* is the first component of a village to be constructed, and around it the houses are built which form the plaza. The *sipapu* is a symbolic medium of exchange and communication between the upper world of the living and the lower world of the spirits—between life and life after this life.

Hieb (p. 242) notes that the use of trucks became popular in the 1930s and cars in the 1950s.

According to Hieb (p. 243), there is no greater conflict between Hopis and non-Hopis than the issue of who should have access to *wiimi* (sacred knowledge). He advises that all plans for study or publication should therefore be cleared by the Hopi Tribal Council's Office of Cultural Preservation.

Hieb (p. 243) observes that "Just as the path of an individual moves from birth to death, the Hopi emergence myth and prophecies make clear the Hopi Path of Life (*Hopivötskwani*).

Hill, W. W.

1940 *Navajo Salt Gathering.* The University of New Mexico Bulletin 349, Anthropological Series 3(4):3-25.

The first part of this article describes the traditional practices of the Navajos in the collection of salt at Zuni Salt Lake. In the second part of the article (pp. 16-23), Hill compares Navajo salt gathering practices with those of other tribes in the Southwest. He finds a number of wide-spread similarities, including the occurrence of the Salt Woman or Salt Mother myth, certain ritual practices, a serious mien during salt pilgrimages, and other analogical behaviors and beliefs. Hill concludes (p. 22),

> That the social and religious pattern of the specific tribe has affected the formalized elements of the gathering already has been pointed out. However, these influences seem to have been, in part, mitigated through the assembling of several tribes at a common site. For example, those who went to Zuñi Salt Lake have effected a more or less standardized pattern of behavior. Undoubtedly this is the result of a localized diffusion through meeting and observing various tribes occupied in the same pursuit. How important this factor has been can be seen readily in the tremendous difference in ritual performance between a Hopi expedition to Marble Canyon and one to Zuñi Salt Lake.

It should be noted that Hill does not systematically analyze the Hopi salt pilgrimages to the Zuni Salt Lake and the Grand Canyon in any detail. The Hopis visit different shrines on the two pilgrimages and the ritual practices thus differ accordingly. Moreover, the source Hill cites for Hopi salt expeditions to Zuni Salt Lake (e.g., Beaglehole 1937) describes Hopi expeditions that combine salt collection with trading. The cultural and behavioral similarities between Hopi pilgrimages to Zuni Salt Lake and the Grand Canyon that are undertaken as part of the Tribal Initiation ceremonies is not considered.

Unanalyzed but implicit in Hills brief comparative discussion of salt gathering practices is the fact that there is diversity as well as similarity within and between different tribes.

Hopi Tribe

n.d. Hopi: The Story of Our People. Office of Public Relations, The Hopi Tribe, Kykotsmovi, Arizona.

This tabloid publication was prepared to provide public information for tourists visiting the Hopi Reservation. With respect to early Hopi history, it is said (p. 1),

> We Hopi are an ancient people. Here in Arizona we trace our history back two millennium. We believe that we emerged here over 100 generations ago.
>
> We follow divine instructions and prophecies received from the caretaker of this world, Massau.
>
> About a thousand years ago, the direct ancestors of today's Hopi occupied a vast territory stretching from the Grand Canyon to what is now called -- Navajo Mountain (Toki'ovi), toward the Lukachukai Mountains near what is now the New Mexico/Arizona borderlands, south to the Mogollon Rim. Hopi clan markings and ruins of ancestral villages clearly mark the traditional boundaries of our homeland.

Hopi Tribe

1930 Petition from Hopi Tribe to Commissioner of Indian Affairs. Plaintiff's Exhibit 279, Vernon Masayesva, etc. Plaintiff, v. Leonard Haskie, etc., Defendant, v. Evelyn James, etc., Intervenor, Civil No. 74-842 PHX-EHC, United States District Court for the District of Arizona.

Hopi leaders states that the land has "... been a most vital subject of our people or tribe at present and for generations past." The petition describes the boundaries of Hopi land.

> After an extended discussion and consideration on the matter we feel that our old tribal land claim concerning our old boundary lines and the area of land within the said boundaries should and ought by right in the light of justice, liberty and the Supreme Being, be taken into consideration for us at Washington that we desire and want our land return to us, because we love our home-land and never want to be moved out of this place. For centuries the Hopi shrines at the distance points (it is better shown on the accompanying map), which borders the Hopi people from every direction, marked and designated the Hopis' tribal land boundary lines. Before the other peoples came the Hopis' essential needs at away places were all obtainable. For example: wild game and fowls was plentiful, timber for building purposes could be gotten from either Sunset Mts in the west and up north of here, salt and etc.

The Hopis conclude the letter with a petition for the return of "our land we love so well ... for the benefit of our future generations."

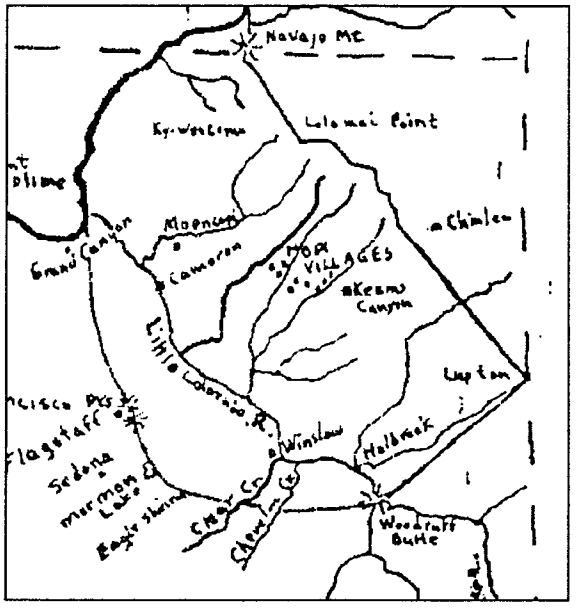

Figure: Portion of "Map to accompany the Hopi Petition of April 8, 1930 drafted by Fred Kabotie ..."

Hopi Tribe

1979 *The Hopi Perspective, A Message to the 96th Congress Concerning the Hopi-Navajo Land Dispute Issue.* The Hopi Tribe, Oraibi, Arizona.

This eight page pamphlet was prepared by the Hopi Tribe to lobby the 96th Congress for an equitable implementation of P. L. 93-531, The Hopi-Navajo Settlement Act of 1974.

The pamphlet begins by describing (p. 3) the "Hopi Homeland" noting the Opinion of the Court in the Healing v. Jones litigation that "... no Indians in this country have a longer authenticated history than the Hopis. As far back as the Middle Ages the Hopis occupied the area between Navajo Mountain (Tokonavi) and the little Colorado River, between the San Francisco Mountains and the Luckachukas."

Use of aboriginal lands is described, including the statement (p. 3),

> ... archaeological evidence of Hopi communities and religious shrines in the region predate even Oraibi by hundreds of years. Regular pilgrimages and gathering trips to these shrines and gathering areas are still made today. As a result, the Hopi have deep religious, cultural, and emotional ties to these lands as well as settled, long-standing legal rights. These are the lands which the Hopi formerly used in peace for centuries before the Navajo came to the Southwest.

A map on page 5 (see figure below) depicts "Hopi aboriginal lands" as bounded by the Colorado River, Grand Canyon, Bill Williams Mnt, Chevelon Butte, Sanders, and the Arizona and Utah state lines.

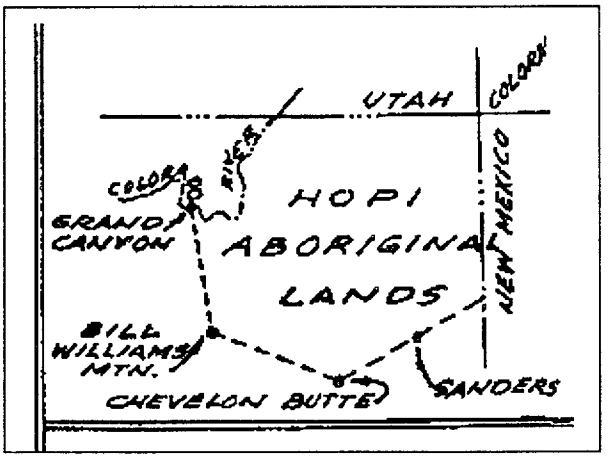

Figure: Map from page 5 of pamphlet.

The rest of the pamphlet provides the Hopi rationale for proposed congressional legislation to amend the Hopi-Navajo Settlement Act of 1974 to include jurisdictional timelines and other goals to solve outstanding problems in implementing the act.

1991 "Hopi Tribe Participates in the Glen Canyon Environmental Impact Study," 14 Nov., p. 3, cols. 1-4.

This article is quite similar to the Jan. 16, 1992 article which reports on the Cultural Preservation Office's official statement about Hopi attitudes toward the impact of Glen Canyon Dam on the downstream environment of the Grand Canyon. In addition to information about Hopi attitudes toward stewardship of the land and the significance of the Colorado and Little Colorado river canyons to Hopi history and spirituality, this first article also includes "Behavior Guidelines for Culturally Sensitive Areas." The guidelines are intended to inform those people who visit the Grand Canyon of appropriate behavior in an area so presently important to the Hopi people. "It also," according to the article,"provides a Hopi perspective of this sacred area.

1992 "Hopi History in the Grand Canyon Documented," 16 Jan., p. 10, cols. 1-4.

This article has the dual purpose of both informing the subscribers to this newspaper of Hopi's official involvement in the Glen Canyon Environmental Study as a "Cooperating Agency" and to report the findings of the Cultural Preservation Office in relation to this important issue. The official text prepared by this office has been included.

It is the feeling of the Hopis, according to the Cultural Preservation Office that:

> While the Hopis no longer live in Ongtupka, concern for its physical and spiritual well being is not diminished. In fact, Hopi concern for the Canyon has increased, since we are not there to take care of the sites. The Hopi believe the Glen Canyon Dam should be operated to protect all of Ongtupka and all plants and animals living there.

In addition to the Hopi concern for all living things in the Canyon, the article lists many significant places in Grand Canyon which demand protection from irresponsible water-release schedules because they "provide a vital spiritual and physical link between the past, present, and future for every Hopi person." Those places highlighted by the Cultural Preservation Office are the ancestral burial sites, the rock art, Sipapuni, and the springs including, and especially noteworthy, the sacred Hopi Salt Mine on the bank of the Little Colorado River.

Hopi Tutu-veh-ni

1993 Babbitt assures Hopi Interest in Study. *Hopi Tutu-veh-ni* 11(99):2.

During a press conference held in connection with the 3rd Annual Grand Canyon Futures Forum in Flagstaff on October 9, Babbitt assured the Hopis that they will be a partner in a federally sponsored study of the Grand Canyon. He is quoted as saying, "Hopis as well as Havasupais and Navajos have many reasons to be involved in planning for the Grand Canyon."

Senator John McCain is reported to have said, "Indian peoples are tied to the Canyon, and we respect their connection with it ... Of course, they should be part of planning futures."

Hopi Tribal Chairman Vernon Masayesva was a featured speaker at the forum. He is quoted as stating,

> Grand Canyon is more than a place to the Hopis. We have strong and ancient spiritual, cultural, and religious ties to the Canyon. We will continue our involvement with the Glen Canyon EIS, and we hope to get a voting seat in the Grand Canyon visibility study. We are involved as advisors now, but as an Indian tribe we should have the same level of involvement as western state governors.

Hough, Walter

n.d. Salt Gathering from a New Mexico Sacred Lake. File 371, NMNH Manuscript and Pamphlet File, Box 25b, National Anthropological Archives, Smithsonian Institution.

This unpublished manuscript describes Zuni Salt Lake. The manuscript concludes with the statement (p. 5), "The Hopi also imagined salt to be in the care of Hurung Wughti, "woman of hard substances," and they offered to her with great ceremony and also the God of War at their shrines in the Grand Canyon, 110 miles distant from the Pueblos, known from ancient times as the place where salt could be gathered."

Hough, Walter

n.d. Notes on Hopi Exchange. U.S.N.M. Manuscripts and Pamphlet File, Box 22, Hough, National Anthropological Archives, Smithsonian Institution.

Hough documents Hopi trade with the "Co-co-ni-na" (Havasupai), as well as with other tribes. With the Havasupai, the Hopis traded blankets of all kinds, bridles, saddles, axes, hoes, foods (corn, beans, peaches), and knit leggings for buckskin, baskets, sweet agave, red paint for face, green paint for katsinas, and cactus bread.

Hough, Walter

1897 The Hopi in Relation to their Plant Environment. *American Anthropologist* 10(2):33-44.

In this short article, Hough discusses the physical environment of the Hopi region and lists the names and uses of 140 species of plants he collected at Hopi in the summer of 1896. The plants were identified by Dr. J. N. Rose of the National Museum. Hough adds several "spring plants" reported by Fewkes (1896) to his plant list to make it more complete.

Hough notes,

> It is true that the Hopi extend their environment by long journeys for various substances. Every berry patch for many miles around is known and visited; a journey of 200 miles or so for salt in the Grand canyon, wild tobacco from the Little Colorado, sacred water from Clear creek, or pine boughs from San Francisco mountain, the home of the snow, is thought of little moment ... The knowledge of the resources of a vast territory possessed by the Hopi is remarkable, and the general familiarity with the names and uses of plants and animals is surprising. Even small children were able to supply the names, corroborated later by adults.

A number of plants identified during the 1993 Hopi river trip occur in Hough's listing of plant species, including (but not necessarily not limited to) the following:

Tümi, Cleome integrifolia T. & G. Leaves boiled with green corn (p. 37).

Lakápa (probably Spanish), Phoradendron juniporium Engelm. Used as substitute for coffee (pp. 37,41).

Léhü, Eriocoma membranacea (Pursh) Bead., Seeds used in ancient times for food (p. 37). Also a name for a clan (p. 43).

Shemóna, Datura metaloides. Rare use as a narcotic (p. 38).

Yün'yü, Opuntia. Stem is boiled and eaten in the spring when food is scarce (p. 38).

Móhu, Yucca augustifolia Pursh. Woven to make hoods for fireplaces (p. 38). Root is used for soap, "notably for washing the hair in religious ceremonies" (p. 39). Used in arts for basketry, paint brushes, tying material (p. 40).

Hóko, Juniperus occidentalis Hook. The seeds are pierced and strung as beads. The ancient graves yield examples. Principle firewood; bark used as match (p. 39).

Sü'ovi, Atriplex canescens James. Ashes used to give a gray color to piki (p. 39). One of the four kiva fuels (p. 42).

Cübi (?) or *Sübi,* Rhus trilbata Nutt. Twigs used for coarse basketry (p. 40). Buds are medicinal (p. 42). Twigs used for ceremonial purposes; branches are one of four kiva fuels (p. 42).

Hovápi, Artemesia tridentata Nutt. Used in flute paho (p. 42).

Pi'ba, Nicotina attenuata Torr. Smoked on all ceremonial occasions (p. 42).

Hough, Walter

1898 Environmental Interrelations in Arizona. *American Anthropologist* 11(5):133-155.

This article comprises a brief description of the plant environment of Arizona, accompanied by several observations about Hopi ethnobotany. Hough lists Hopi plants and their uses at the end of the article, slightly expanding the information he provided in his 1897 article, "The Hopi in Relation to their Plant Environment (*American Anthropologist* 10(2):33-44).

Hough (p. 137) states, "Curiously enough, every Moki is a botanist; not a botanist, of course, in the scientific way; one for practical purposes, rather, who had given descriptive names to his plants long before Lannæus had dressed them out in high-sounding Latin."

Hough (p. 138) notes that Hopis travel long distances to collect specific plants, stating "... absurdly long journeys are taken for favored herbs or other useful vegetative substances." One plant collection trip Hough documents entailed a journey of over 400 miles to obtain birch bark.

As Hough (p. 138) notes, the process of plant collecting took people back to ancestral archaeological sites, and gave them a wide knowledge of their regional environment. Their journeys included Cataract Canyon where they traded with the Havasupai.

> These journeys are common, for the Moki is no stay-at-home, but roams far beyond the wildest view from the high vantage ground of his village, visiting the former seats of his people of by-gone centuries. Thus he knows the flora and fauna over a wide region, and is as much at home in the White mountains as on the Great Colorado. In former times he may have journeyed to the Gulf of California for precious sea-shells ... or made long quests for the much-prized turquoise, just as he now goes to the Coconino canyon for baskets or deerskins.

Hough (pp. 138-139) alludes to the association of Sálako and the Grand Canyon by noting, "Perhaps Sálako, mother of the Snake Priest and herself hereditary Snake Woman, is the chief medicine woman in Tusayan. She is indeed a remarkable character, and no one is better versed in spells and herbs than she ... From Sálako and her son Kopele much of the information in regard to plants used by the Moki was obtained."

Hough, Walter

1900 *The Moki Snake Dance ; A Popular Account of that Unparalleled Dramatic Pagan Ceremony of the Pueblo Indians of Tusayan, Arizona ,with Incidental Mention of their Life and Customs.* N.p., Passenger Dept., Santa Fe Route.

The Santa Fe Railroad Company published this brief pamphlet on the Hopi Snake Dance, atleast in part, to attract nineteenth-century sightseers to the Southwest region serviced by their new rail line. Recognizing its use as a form of advertisement, the reader should acknowledge the possibility of embellishment of information. But as an early twentieth-century account of Hopi life, it is still useful as a primary document.

As a supplement to his "popular account of that unparalleled dramatic pagan ceremony"--the Snake Dance--Hough devotes attention to the process of migration which led to the tribe to its eventual arrival on the Mesas of the Painted Desert region of Arizona where he encourages visiting. Hough traces two points along the Hopi migratory path--one, known as "the place of the antelopes" and the other referred to as "the place of the two views" in the valley of the Little Colorado River. He writes (p. 26):

> Thirty-two miles to the north [of "the place of the antelopes] is the next stopping place, and the clans must have prospered in the valley of the Little Colorado at Winslow, for here are the ruins of five towns, called by those versed in the lore of the past[,] Homolobi, or "the place of the two views."

He goes on to explain that,

> Long before the *conquistadores* came to ravage the New World, the people of Homolobi had abandoned their towns and taken up their weary journey to Tusayan, where now are seven towns of the "good people." It is interesting to find that in Wolpi different clans live in different sections of the town just as they had camped together in the old days, and in the order in which they came from their desert wanderings.

Departing the valley of the Little Colorado as a home site, the Hopi never severed all ties with that river. In fact, Hough points specifically to their continued dependence on the ecology of the Little Colorado for the timber used in Hopi construction. In a brief discussion on the presence of Catholic priests among the tribe, the author reports that "they [the Hopis] received the priests and submitted to the enforced labor of building a church, carrying, with infinite toil, beams of cottonwood from the Little Colorado. Many of these carved beams now support the roofs of the pagan *kivas* (p. 23)."

Hough was a sensitive observer during his stay among the Hopis. Some of the other tidbits of information and stories he chose to relate in his pamphlet demonstrate his eye for subtleties. A useful example is a short anecdote he shares in which a Hopi farmer from Wolpi gets bitten on the hand by a rattlesnake. The story proceeds as such: "After a great deal of suffering he recovered. Soon after, the Snake Society informed him that he must become a snake priest, because he was favored by the rattlesnake (p. 18)." This oral history conveys useful information about the Hopis' interpretation of events which occur

around them, namely, that the rattlesnake acts as a thoughtful member of their shared environment. Hopis considered the reptile capable of behavior contingent upon a sense of purpose and intelligence.

Hough, Walter

1902 A Collection of Hopi Ceremonial Pigments. In *Annual Report of the Board of Regents of the Smithsonian Institution for the Year Ending June 30, 1900,* pp. 465-471. Government Printing Office, Washington, D. C.

This article describes a collection of twenty-five Hopi ceremonial pigments collected by A. M. Stephen, along with additional specimens collected by pigments collected by J. W. Powell and James Stevenson. Stephen's notes on the collection were "brought together" by Dr. Washington Matthews and presented at the 1893 International Folk-Lore Congress of the World's Columbian Exposition. This presentation was published under Stephen's name in the Archives International Folk-Lore Association, I, pp. 260-265, Chicago, 1898.

Mineralogical deteminations of the pigments were made by Wirt Tassin, assistant curator in the division of minerals.

Hough states (p. 465),

> The Hopi are assiduous collectors. A catalogue of the substances brought to their pueblos from long distances would awaken surprise, and the diverse materials gleaned from a region so unpromising in appearance would increase the wonder. Every house is a museum of the environment, with specimens from the mineral, animal, and vegetal kingdoms, and every Hopi is a respository of knowledge as to the places where minerals may be secured. Time and distance are of little thought when it comes to procuring the materials desired. For this reason the pigments and dyes, when compared with those employed by other Ameican Indian tribes are remarkable for their number as well as the diversity of their origin. The colors range over the whole spectrum and furnish a number of shades and tints ...

Hough notes (p. 466) , "Frequently the name of a pigment refers to the place of its origin or to the use to which it is to be put, or, if a compound, to the principal constituent."

Hough says (p. 466), "The use of pigments among the Hopi is confined to that large element in Hopi life, ceremony, and colors are displayed in profusion on the paraphernalia of their complex religion."

Hough reviews the directionalism of color symbolism reported by Stephens (1898).

Hough notes (p. 469), "... the Hopi exercise considerable skill in the preparation of a number of their colors, especially those of organic substances. In one case piñon gum is employed, as a medium like varnish, and in two cases lakes are produced by complicated processes involving the use of alum. The Hopi also know the value of alum as a mordant, this substance being derived from an impure alum-bearing clay."

In the catalogue, Hough lists the following minerals relevant to the GCES project:

"3. Ko ho ni ni cü' ta. 175684. Probably hematite ground and worked up with water. The Hopi obtain this pigment from the Kohonini country in Cataract Canyon, 110 miles west of the reservation. The color is symbolic of the northwest region. Its use is most marked in the paraphernalia of the Snake Society. (p. 469)"

"9. Ca' kwa, 'green.' Copper carbonate, composed of malachite and azurite. 175690. The Hopi collect this paint 110 miles west of the reservation in Cataract Canyon. It is used for painting Pahos, masks, figurines, etc. Frequently found in graves in the ancient ruins."

Hough also notes (p. 469-470) that the berries of *Rhus trilobata* are used to made a red paint.

Hough, Walter

1906 Sacred Springs in the Southwest. *Records of the Past* 5(6):164-169.

Hough describes the economic and spiritual significance of water in terms of its scarcity as a resource the arid Southwest. He provides much anecdotal information, including some general comments pertinent to Hopi.

He notes (p. 165),

The feathered stick set in the edge of the water by the Hopi are messages to the gods of the underworld and the snakes employed in the Snake Dance are set free at the springs to carry the petitions of the people to the gods." He concludes, "Sacred Springs may therefore be considered as altars, and the offerings as sacrifices, whose essence may be carried by the water in the same way as the fire offering is carried by the fire.

Hough states (p. 166), "The Hopi believe that the waters under the earth are controlled by a great plumed serpent, and that he has favorite springs for his appearances. Montezuma's Well, in northern Arizona, is said to be one of these."

In Hough's opinion (p. 167), "Some springs are more sacred than others; for instance, the one at each group of Hopi pueblos developed with great labor by digging out the earth around it, forming a pool walled up around the sides, and having steps leading down to the water, where certain ceremonies are performed."

Of historical interest, Hough notes (pp. 167-168),

> It may be said in passing that one of the chief causes of friction between the Hopi and the agencies of the Government who sought to better their condition was the profaning of the sacred springs by the locations of school buildings, wash houses, etc. near them. The Hopi have now accepted the situation, and most of them, no doubt, see the practical value of the plan, but the benighted conservatives deeply disapprove of this evidence of progress.

Hough describes the Hopi's custom of procuring water for ritual use from springs at great distance from their villages. He says (p. 168) ,

> It is not necessary that springs held in great esteem should be located near the present villages, they may in fact be 100 miles away and the one delegated to bring "sacred water" from such a spring religiously makes the journey and returns to it with a tiny vase filled at the command of the priest who conducts the ceremonies. During a ceremony at a Hopi pueblo one may see toilworn men returning from quests to the sacred springs, bringing water, rushes, clay and other things required in the observances.

Hough (p. 168) adds that

On one occasion the writer saw a party, then 70 miles from home, going to fetch water from a spring some dozen miles farther along the trail. This custom is an important clew to the location of the former seats of the clans that inhabit the present villages; because the old though ever vital traditions prescribe for ceremonies which are perpetuations of clan observances, water from springs at which their ancestors drank. Where the inquiry is made one may learn that near the springs visited to obtain water as prescribed were the old pueblos of certain clans.

Hough, Walter
1915 *The Hopi Indians.* The Torch Press, Cedar Rapids, Iowa.

Hough's book documents some important points of Hopi ethnography and helps demonstrate the time depth behind many Hopi beliefs and claims about their land and history.

Hough documents that the Havasupai traveled to the Hopi Mesas to trade "fine baskets and superior white-tanned deerskins" that were high demand by the Hopis (p. 25-26). He also notes that (p. 26), "The Hopi also traverse the sandy waste to visit the 'People of the Ladders,' as they call the Havasupai, and bring back sacred red ochre and green copper stone for pigments. The Havasupai and Hopi are likewise linked by traditions of an ancient time."

Hough (p. 26) points out that although the Hopi and Paiutes were "remotely related" they did not always have friendly relations and sometimes the Paiutes raided Hopi villages.

With respect to clan migrations and southern Arizona, Hough (pp. 26-27) says,

> Very long ago the Pima were closer neighbors and allies of some of the Hopi clans, who touched them in their wide migrations, which brought them to the "Palatkwabi." This is the Red Land of the south, lying on the Verde River and its tributaries. The Hopi lay claim to the Tonto Basin in southern Arizona, which has been thought to be their ancient country since far and wide over this southern region is found the yellow pottery so characteristic of the golden age of the Hopi.

Hough (pp. 169-170) describes the eagle gathering areas of the Hopi, noting

> the Snake clan claims the eagle nests near their old village of Tokonabi to the north of Walpi; the Horn clan those to the northeast; the Firewood clan those at the upper end of Keam's Canyon; the Bear clan those at the mouth of the same canyon; the Tobacco clan those on the crags of Awatovi; the Rain Cloud clan the nests in the Moki Buttes; the Reed clan those in the region of their old town forty miles north of Navajo Springs on the Santa Fe railroad; the Lizard clan the nests on Bitahuchi or Red Rocks, about forty miles north of Walpi; ... the eagle nests west of the pueblos along the Little Colorado and Great Colorado belong to the Oraibi and Middle Mesa villagers ... one cannot meddle with eagles within forty or fifty miles of the Hopi towns without trespassing on property rights.
>
> The curious fact comes out that these eagle preserves are near the place of ancient occupancy of the clans, and show in a most interesting way the lines of migration by which the several clans traveled to the villages where they now live. These rights are jealously guarded by the Hopi and are one

> of the sore spots in the their relations with the Navaho; they frequently ask to have the Government define their eagle reservations by survey to establish boundaries free from molestation.

Hough (p. 170) notes the eagle is a Hopi "sacred bird" whose feathers are used in religious ceremonies. The downy plumes are thought to be efficacious in carrying prayers to the gods.

Hopi oral history identifies Homolovi as an ancestral Hopi town (p. 204).

Hough (p. 204) places great value on Hopi oral history, noting they have a number of traditions about the Spanish friars that been passed down "with complete preservation of all the details." One of these accounts (pp. 204-205) concerns the friar at Oraibi who did not "relish" the water from the springs near that pueblo and consequently compelled the Hopis to bring water from Moenkopi. One Hopi tried to fool the Catholic priest by filling his canteen at Oraibi but the priest could taste the difference in the water and compelled him to go to Moenkopi.

Hough, Walter

1919 *The Hopi Indian Collection in the United States Museum.* U.S. National Museum, Proceedings 54:235-296.

Hough mentions and illustrates a ceramic "salt vessel" (p. 239, Pl. 23). This is a small ceramic oblong jar with a restricted oblong neck. The vessel is painted but the black and white illustration does not indicate colors were used in producing the ceramic.

Hunter, Helen Virginia

1940 *Ethnography of Salt in North America* . M. A. thes., Univ. of Pennsylvania.

This MA thesis in Anthropology is an ambituous work which strives to illuminate the significance of salt in native North American cultures. After a discussion of the biochemical dimension of salt and its presence throughout the world, Hunter confines her exploration of salt to an ethnographic focus with North America and its early inhabitants as her specific objects of inquiry. According to the author, she is "attempting to determine the importance of salt in the economic and ceremonial life of the [North American] Indians, and to discover if there is any correlation between the type of living of a people and their use of salt (p. 7)."

Admirably, Hunter resists the urge to state overly-grand generalizations about Native Americans' use of salt; instead, she investigates in some depth the individual practices of various groups. She organizes the information both topically and geographically, in each section proceeding from the East Coast through the Plains to the Northwest, down to the Southwest and into present-day Mexico.

According to the author, the richest source of data for this study comes from the southwest and Mexico. Hunter writes (p. 11):

> By far the most notable method of obtaining salt is found in the southwest and among agricultural peoples in Mexico. Here the salt-gathering expeditions provide a study of various aspects of the life of the people--ceremonialism, social organization, and mythology, all woven into a complex around salt.

On page 12 a detailed account of Hopi methods of obtaining salt is presented in chart-form. This is a useful summary of Mischa Titiev and Ernest Beaglehole's reports on the salt-gathering practices of the tribe. In this summation, Hunter describes the requirements for participation in the salt-gathering ritual, preliminary steps taken, the process of getting to the salt sources, the methods of collecting the product, and, finally, the correct procedures for returning from the expedition. One important note required here is that although throughout the study Hunter is generally quite careful about the information she presents, in her sections on Hopi she sometimes fails to make clear whether she is discussing practices for salt-gathering expeditions to Zuñi Salt Lake or to Salt Canyon in the Grand Canyon of the Colorado River. She distinguishes between these two sources at times, revealing that she is quite aware of the distinction between them, but fails at some critical points, (specifically, in her summation in the chart on p. 12) to make clear which region is being discussed. Nonetheless, this condensed version of earlier accounts by Titiev and Beaglehole is useful.

After examining the process of salt-gathering for certain southwestern tribes, Hunter goes on to explore the ways in which these rituals reflect social organization, ceremonialism, and mythology in these cultures generally. For Hunter, there is no question that the prescriptions for the proper execution of salt-gathering are imbued with symbolism and significance.

In reference to social organization among Hopis, Hunter explains that status is woven into the form of the salt-gathering ritual. She uses the example of the expedition into the Grand Canyon [referred to by Hunter as Marble Canyon] in which the leader of the expedition's elevated position in society is recognized by his place in relation to the other two participants pilgrimaging to the salt spring. The leader goes first in the descent to the spring and follows the group out on the ascent. His primacy within the social organization of Hopi and among Wuwitcim members (of which all three participants of the expedition must be a part) is symbolically demonstrated (pp. 14-15). Also present in the ritual of salt-gathering is attention to clan distinction and dichotomy of labor according to gender (pp. 15-17).

Hunter writes of the connection between salt-gathering and myth that "[a]mong peoples who obtain salt by the elaborate method of the salt expedition as described above, myth and ritual are closely related to the success of obtaining the salt (p. 17)." In the same passage, she elaborates: "Myths explain the origin of salt and its geographical locations, religious and ceremonial aspects of salt and the deification of salt. Among a majority of groups salt is conceptualized into a diety, a goddess or twin war gods, with varying attributes."

Hunter explains that, for the Hopi, the myths pertaining to the salt spring in Grand Canyon and Zuñi Salt Lake include *Ongwuhti* (the Spider Woman), *Pukonghoxa,* and *Palungahoxa* (the Twin War Gods). These characters play a large part in determining the accessibility of salt for the Hopis' diet. Hunter demonstrates this relationship as follows: at Zuñi Salt Lake these dieties "rule, and from them permission must be obtained to gather the salt, and they must be propitiated (p. 19)." The interplay between myth, ritual, and reality is evident in this example.

Hunter describes other elements of the significance of salt in Hopi culture. Moreover, she speculates about possible correlations between aspects of the ritual and the practical necessities which they represent. For instance, she conjectures that the basis of trade between the women providing the salt gatherers with food and then these men returning later with salt for these women is a means of reifying the importance of salt as an object of trade among southwestern native peoples (p. 21).

In addition, she posits that ceremonial use of salt in therapeutics reveals that dialectical relationship between concrete and imagined reality. Hunter reports that "[t]he Hopi salt gatherers, in addition to rubbing salt on their bodies, dipped a stone in the salty water, which they sucked, and also drank some of the salt water to promote health and bravery through communion with *Pukhonghoya*, the salt (p. 40)." This ritual intake of salt for health purposes is not solely symbolic. Hunter explains that "the physiological necessity for salt . . . provides the underlying cause for the importance of salt in regions in which salt-intake is small, or in which a vegetal diet predominates" and, furthermore, that this "necessity gives rise to a complex of activities, ceremonies, and beliefs centering around salt (p. 52)." The physiological necessity of salt intersects with the prescriptions of ritual to offer a complex yet integrated belief system.

In addition to speculation about the significance of ritual eating of salt, Hunter refers to periods of mandatory fasting from salt which equally demonstrates the importance of salt among southwestern tribes (pp. 44-46).

And finally, Hunter concludes that the Europeans' introduction of salt into the southwestern region of North America caused salt's importance in ceremonies to diminish (p. 49). According to Hunter's thesis, salt's heightened significance depended on scarcity and it follows that once made more available, salt's power to structure Hopi and other southwesterners' reality, declined.

Hughes, Donald J.

1967 *The Story of Man at Grand Canyon.* Grand Canyon Natural History Association Bulletin 14.

In recounting the history of Cardenas's expedition to the Grand Canyon in 1540, Hughes notes that the Spaniards could not have visited the Hopi Salt Mine since this is next to the river that the Spaniards never reached. He adds, "... and the Hopis would not likely have taken the strangers to such a holy place. Indeed, the Hopis could have guided the Spaniards to the river had they wished to do so. That they did not probably shows the attitude of the Peaceful People toward the warlike invaders."

Ives, Lieutenant Joseph C.

1861 *Report Upon the Colorado River of the West , Explored in 1857 and 1858 .* Washington, DC: Government Printing Office (36th Cong., 1st Sess., House Ex. Doc. no. 90.)

Lt. Ives was commissioned by the Secretary of War in the year 1857 to explore and survey the canyons of the Colorado River. During his expedition, Ives and his party encountered the Hopi people. The Lieutenant makes frequent references in his report to the Hopi's use of the Colorado River and its resources. The most direct evidence of this relationship between the Hopi and the canyons of the Colorado is the physical link worn between the two by the numerous pilgrimages made from the Hopi Mesas to the salt springs in the Little Colorado River canyon near the confluence with the Grand. Ives writes (p. 117):

> At noon to-day we came to the object of our search--a well-beaten Indian trail running towards the north. Camp was pitched at the place where it strikes the river, and it is the intention to make the second attempt to-morrow to penetrate the unexplored region. Near by are several salt springs, and scattered over the adjacent surface are crystals of excellent salt. This accounts for the trail, for it is doubtless here that the Moquis obtain their supply of that article.

The party followed the trail to the Third Mesa of the Hopi homeland. After a day among the inhabitants of Mooshaneh, the party set out for Oraibi to the northwest. From there, Ives communicated that he wanted to head further north in search of water. Upon such request, one of the Hopi guides "signified that four days' travel in that direction would bring us to a large river (p. 121)." An Oraibi Chief comments that from that point of the canyon rim it would be impossible for the mules to reach the bank (p. 124). Many other notations of this sort throughout Ives' report (Chapters IX and X) suggest a familiarity by the Hopi of the terrain around them, yet none are conclusive.

Ives does, however, mention that in the Cardinas expedition in the sixteenth century, that explorer "with a party of twelve men, reached the pueblos of Moquis, and repaired from them, with Indian guides, to a portion of the Colorado, far distant from that seen by others (p. 19)."

Ives, Lieutenant Joseph C.

1861 Report Upon the Colorado River of the West , Explored in 1857 and 1858. 36th Cong., 1st Sess., House Ex. Doc. no. 90. Government Printing Office, Washington, DC.

Lieutenant Ives was commissioned by the Secretary of War in the year 1857 to explore and survey the canyons of the Colorado River. During his expedition, Ives and his party encountered the Hopi people.

In his journal, Ives makes frequent references to the Hopi's use of the Colorado River region and its resources. Ives specifically mentions collection of salt from a spring in the Little Colorado River valley. He writes (p. 117),

> At noon to-day we came to the object of our search — a well-beaten Indian trail running towards the north. Camp was pitched at the place where it strikes the river, and it is the intention to make the second attempt to-morrow to penetrate the unexplored region. Near by are several salt springs, and scattered over the adjacent surface are crystals of excellent salt. This accounts for the trail, for it is doubtless here that the Moquis obtain their supply of that article.

The party followed the trail to Second Mesa. They spent a a day among the inhabitants of Mishongnovi on May 12. They showed the Hops a map of the region they were exploring, on which the Hopi chief placed the positions of the six Moquis pueblos. Ives says (p. 121),

> I told him that we wished to go further to the north, and he signified that four day's travel in that direction would bring us to a large river. Whether there were watering places between it was difficult from his signs to determine. I then asked for a guide, promising a mule to any one that would accompany me, whereupon he said he would be ready to go himself early the next morning.

In describing trails in the vicinity of Mishongnovi, Ives says (p. 122),

> Several trails radiated from the foot of the bluff n perfectly straight lines, and could be traced a long way over the level surface. One conducted to the cañon of the Flax river and doubtless to the Yampais village; another, the chief told us, was the trail of the Apaches; another, that of the Coyoteros; a fourth came from Zuñi, and still further east was the Navajo trail leading to Fort Defiance.

Ives' party next set out for Oraibi. The chief there was not very friendly and did not want any of his people to accompany Ives on his journey west "on the ground that there was no water, that the country was bad, that we would have to travel several days before we would come to a river, and if we did reach it the mules could not get to a

bank" (p. 124). Another resident of Oraibi was friendlier but said he could not go while his superior objected. This Hopi said (p. 124),

> ... said there was a water hole a long day's journey off where could get a small supply; that to this point he would guide us, and that there was a trail beyond which could be followed as well without guidance as with it. He persisted that there would be a march of three or four days without water before reaching the river. As nearly as I have been able to judge, they consider a day's march thirty miles.

Ives explored the country about twenty miles to the northwest of Oraibi to investigate a trail the Hopis told him was the only practical route to the upper reaches of the Colorado River (p. 125). Ives found the trail but his party eventually turned back and returned to Oraibi after deciding there was not enough water along the trail for their tired mules. They found the watering hole the Hopis had described and while it had recently had water it was dry. After visiting First Mesa, Ives proceeded to Fort Defiance.

Many other notations of this sort throughout Ives' report (Chapters IX and X) demonstrate a Hopi familiarity with the terrain between their villages and the Grand Canyon.

James, George Wharton

1911 *In and Around the Grand Canyon: The Grand Canyon of the Colorado River in Arizona,* rev. ed. Boston: Little, Brown, and Company.

In this book, James discusses many aspects of Grand Canyon history and exploration. One very short chapter looks at the role Hopis played in that exploration. James concludes that although a trail existed which linked the Hopi villages directly with the Grand Canyon, Hopi guides purposefully neglected to show it to the European and American explorers of the Canyon. Hence, the Hopis refused to offer the assistance they were capable of providing.

James speculates that the Hopis did not show the white explorers their route into the canyon because they were (p. 240),

> fearful that the strangers would use the knowledge thus gained against them, or that they might find in that region or river something that would lead them to desire to make frequent excursions into the country and thus become too common visitors, or perhaps that the sight of their precious salt ledge would arouse their covetousness.

Any or all of these reasons "were sufficient," according to James, to cause the Hopis "to *mis*guide" the Cardenas party in 1540 and to do the same thing three centuries later to the Ives expedition (p. 241).

James, George Wharton

1900 *In and Around the Grand Canyon: The Grand Canyon of the Colorado River in Arizona.* Little, Brown, and Company, Boston.

In this book, James discusses many aspects of Grand Canyon history and exploration. In a discussion of trails to the Grand Canyon, James (p. viii) mentions "The old Hopi (Moki) Salt Trail into the Little Colorado and Grand Canyons. Reached form the Hopi villages."

One very short chapter looks at the role Hopis played in that exploration. James (p. 239) describes the Hopi Salt Trail by noting,

> About eight miles from the mouth of the Little Colorado is located this old and historic trail, long used by Hopituh, Paiutis, and Navajos. It leads to a salt ledge, extending from the lower end of the Little Colorado, some eight or nine miles, towards the Tanner-French Trail of the Grand Canyon. Owing to the cheapness of the salt, and the superior quality of the article purchased of the Indian traders, the aborigines have ceased fetching salt from this ledge; hence the trail is rapidly becoming impassable, and unless something is speedily done to it, not even the agile Hopi and their fearless ponies will be able to use it.

James concludes that although a trail existed which linked the Hopi villages directly with the Grand Canyon, Hopi guides purposefully neglected to show it to the European and American explorers of the Canyon. Hence, the Hopis refused to offer the assistance they were capable of providing. James (p. 240) speculates that the Hopis did not show the white explorers their route into the canyon because they were,

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Any or all of these reasons "were sufficient," according to James, to cause the Hopis "to *mis*guide" the Cárdenas party in 1540 and to refuse to guide Ives' expedition three centuries later (p. 241).

James, George Wharton

1903 *The Indians of the Painted Desert Region.* Little, Brown, and Company, Boston.

James notes (p. 107) that according to the "legendary lore" of the Hopi Snake clan al people made their ascent from the lower world to the earth's surface through a portion of Pis-is-bai-ya (the Grand Canyon of the Colorado River) near its confluence with the Little Colorado River. He relates a much abridge account of Tiyo (pp. 108-110).

James also notes (pp. 71-72),

> The Hopi is quite a traveller (sic). Though fond of home, I have met members of the tribe in varied quarters of the Painted Desert Region. They get a birch bark from the Verdi Valley with which the make the dye for their moccasins. A yellowish brown color, called *pavissa*, is obtained from a point near the junction of the Little Colorado and Marble Canyon. Here they obtain salt, and at the bottom of the salt springs, where the waters bubble up in pools, this *pavissa* settles. Bahos, or prayer sticks, are always deposited at the time of obtaining this ochre, as it is to be used in the painting of the face of the bahos used in most sacred ceremonies. The so-called Moki trail is evidence of the long association between the Hopis and the Havasupais in Havasu (Cataract) Canyon, and I have often met them there trading blankets, horses, etc., for buckskin and the finely woven wicker bowl-baskets — kü-üs — of the Havasupais, which are much prized by the Hopis.
>
> Occasionally he reaches as far northeast as Lee's Ferry and even crosses into southern Utah, and at Zuni to the southeast he is ever a welcome visitor. The Apaches in the White Mountains tell that on occasions the Hopis will visit them, and when visiting the Yumans in 1902 they informed me that long ago the Snake Dancing Mokis were their friends, and sometimes came to see them.

James, George Wharton

1910 *The Grand Canyon of Arizona, How to See It.* Little, Brown, and Company, Boston.

This guide book prepared for a popular audience contains some pertinent information about Hopi and the Grand Canyon. James notes that the Hopi House in Grand Canyon Village is model of room block at Oraibi (p. 118) and he describes the Tao and Powamu altars installed there by H. R. Voth (p. 123).

With respect to the "Old Hopi Trail, James (pp. 145-146) states the road to the eastern end of the Grand Canyon "is practically the line of the old Hopi trail." This road passes Grand View Point and Hotel, Hance's Old Camp and Trail, and the Red Canyon Trail. After crossing the Little Colorado at Tanner's Crossing, James describes it as one day's ride (forty miles) to the corn fields of the Moki.

James further describes the Hopi trail by noting (p. 153),

> One of the most noted aboriginal trails in the western United States, is the old Hopi (generally called Moki) trail, leading from the seven villages of the Hopi and their agricultural offshoot, Moenkopi, to the Canyon of the Havasupais. This was the trail followed by Lieut. Frank Hamilton Cushing — the noted ethnologist — when he visited these Khune kiwes while he was living at the interesting pueblo of Zuni in new Mexico. I have made the whole trip from Hopiland to the Havasupais and back twice, and have ridden for many years over small portions of the trail. It is intimately connected with the history of two of the people seen most at the Canyon. According to Havasupai legends, the Hopis and the Havasupais are descended from twin brothers. Hence they have always been friendly and have traded continuously the products of their own manufacture. The Hopis exchange their horses, sheep, and burros, laden with blankets, pottery and silverware, for buckskin, Havasupai baskets (which they prize very highly), dried peaches, etc.
>
> Originally this was a foot trail; then horses, burros and mules were used; and now, in some portions of its distance, notably from Moenkopi to Oraibi, it is used for wagons.

James (p. 153) says it took five or six days to travel the trail from Havasupai to Hopi. He describes the Moki Trail as it leaves Cataract Canyon (pp. 156-157),

> ... in several places, it passes through narrow clefts, with ponderous, overhanging rocks, the whole course barely wide enough to permit a laden mule to get through with its pack. It is an almost vertical ascent of about twelve hundred feet which winds around and up the clefts, up steps hacked

> out of the solid rock with flint axes and hammers, by the patient hands of long-dead Indians.

James (p. 154) says that this is the spot where the Hopis and Zunis believe that

> ... Ahaiuta, one of the twin gods of war, after the waters of the world had arisen and overwhelmed the nations of their ancestry, and flooded the whole earth from the far west to the Rio Grande, dug a little outlet for the waters. the flood, finding this hole, had rushed down into the interior of the earth, and had thus worn this terrific cleft, and the gorge below, leaving the marks of its strife upon the banded rocks which surrounded and hovered over us.

James describes the trail through the Coconino Forest as a "horse trail" that was inaccessible to wagons.

In recounting the history of the Hopi guiding Cardenas to the Grand Canyon, James (p. 198) speculates,

> I hazard the conjecture that the Hopis gave Cardenas as much wandering about as they could, took him to this terribly bleak and barren spot where even to-day one can scarcely prevail upon a Hopi or Navajo to guide him, in order that he might be discouraged from making further explorations in the neighborhood."

James (p. 198) mentions the Hopi trail to Havasupai passed "Hue-tha-wa-li," the White Rock Mountain opposite of Bass Camp. He says Hopis traveled over this trail several times a year.

James, Harry Clebourne

1940 *Haliksai! A Book of Hopi Legends of the Grand Canyon country as told to Harry C. James*. El Centro, California: The Desert Magazine.

James opens this collection of stories with these words (p.5):

> This is a collection of Hopi legends gathered during camping trips through Grand Canyon country of northern Arizona.
>
> Around the campfires at old Oraibi, along the rim of the great Canyon itself, and down in the bottom of the gorge, I have listened to Tewaquaptewa, the old chief of Oraibi, to Poli and Anthony Neumkewa, to Jim Kewanuwatewa and other Hopi tell these stories of the olden days.
>
> "Once upon a Time" is a favorite way to begin the legends of the white man. HALIKSAI is the "Once Upon a Time" of the Hopi.

These stories reveal clearly the depth of Hopi people's connection to the Grand Canyon country since time immemorial. Stories of emergence, creation, migration, discovery, life after death, and much more all emanate from the depths of this awesome chasm and, both figuratively and literally, disseminate outward.

James begins, appropriately, with a story entitled "Sipapu (The journey up from the underworld)" because it is the tale of emergence. It explains how people discovered this world from their former home in the underworld. The opening which connected the underworld with the unknown world overhead was the Sipapu located in the Grand Canyon. Through this hole, human beings entered and inhabited the surface of the earth. The significance of this place of emergence to Hopi is apparent from the final statement of this story: "In all our kivas, the underground ceremonial rooms, and in all the dance plazas of our villages you will find small shrines fashioned of flat rocks representing Sipapu but which remind us constantly of the day our ancestors came up from the underworld (p. 9)."

Other stories affirm this oral history tradition which places the roots of the Hopi people in the Grand Canyon. "How the Great Chiefs Made the Moon" and "How the Great Chiefs Made the Sun" both explain that once the necessary requirements of moon and sun were completed, the human migrations out of the Canyon began. James relates the story in this way (p. 11):

> Now with the moon to light the earth at night and the sun to light and warm it by day, the people decided to pick up their provisions and go on. As they started they divided and the white people took a trail far to the south, the Hopis one to the north, and the Pueblo Indians one midway between them. Thus they journeyed on from Sipapu to the places where they were to live. The Hopi wandered a long time, building houses and planting at different places until they arrived at the mesas where they now live. The ruins of these ancient villages are scattered to the very beginnings of the great river of the canyon--the Colorado.

The story, "The Evil One that Came up from the Underworld (p. 12)" explains how Hopi learned that it was through the Sipapu and back into the underworld that they

returned after death. Also, in the story "A Journey to Skeleton House (p. 17)" it is reaffirmed that the Grand Canyon is where the Hopis go after they die.

The legend entitled "Canyon Journey (pp. 14-15)" explains how Hopis learned that the Grand Canyon was navigable to the ocean. In the story, a curious young man from the Snake clan set out alone on a boat through the canyon. Despite many dangers "he passed safely. At last he passed out of the dim canyons into a wide sunlit valley. He continued through this a great distance until the waters became salty to his taste. Finally, ahead of him stretched nothing but water. He had reached the great ocean of the west (p.14)."

The remainder of the stories extend out from the Grand Canyon to the surrounding areas and explain other environmental characteristics of the Hopi homeland in the Arizona desert. For instance, one story describes how peaches became sweet, why mice live scattered over the land and not in communities, when an earthquake took place in Oraibi and how a blind man and a lame man saved the village. There are also many more.

James, Harry C.
1956 *The Hopi Indians.* Caxton Printers, Caldwell, Idaho.

This book, written for a popular audience, provides a well-written but secondary source for historical and ethnographic information found in other publications.

James (p. 74) notes that Old Bill Williams is believed to have spent several months with the Hopis in 1827.

Jeffers, Jo

1966 Rain Song: The Story of the Hopi Snake Dance. *Arizona Highways* 42(8):2-11.

This article for the popular press includes some interesting information about the Hopi Snake Dance. Generally, the author presents Hopi people and practices in a very favorable light. Too frequently, however, Jeffers slips into that irritating tone of the "noble savage" myth. This tendency diminishes the worth of the article.

As part of Jeffers' effort to educate his audience about the meaning and importance of the Snake Dance, the author writes: "To the Hopi, the snake is sacred, a messenger to the gods of the Underworld, where man once lived before he emerged out of the first 'sipapu' onto this earth. An ancient and respected brother to be revered, not feared (p. 2)."

Jeffers also tells us that Huru-ing Wuti is the Goddess of Hard Substance who Lives in a "western ocean kiva (p. 2)."

Jones, Volney H.

1950 The Establishment of the Hopi Reservation, and Some Later Developments Concerning Hopi Lands. *Plateau* 23(2):17-25.

This is a useful article that describes the 1882 Executive Order that established the Hopi Reservation and the subsequent establishment of District 6. Jones succinctly describes many of the problems the Hopis experienced with Navajo encroachment prior to 1950.

Joshevama, ValJean

1993 Testimony of ValJean Joshevama, Sr., Shungopavy Village, The Hopi Tribe, Monday, February 8, 1993, American Indian Religious Freedom Act Amendments. Ms. on file, Cultural Preservation Office, Kykotsmovi, Arizona.

In this testimony presented at a field hearing for a proposed Congressional act, Joshevama describes the cultural importance of eagles for the Hopi people. He says (pp. 1-2),

> Before anyone ever shared this country with us, we depended on nature and took care of our environment and all its products through our annual cycle of ceremonies. For each ceremonial event, we offered prayers from our hearts to our father the sun, through the preparation and offerings of prayer feathers and corn meal.
>
> We prayed for rain, we prayed for abundant plant, animal and human life. We prayed for serenity of life among all people. With our prayers we looked hopefully again to that tomorrow where our lives will be better. We would pray in our hearts that we would experience forgiveness.
>
> And each time that we offered our prayers, there was the ever present feathers from my other father, the eagle.
>
> This eagle, who comes nearer to the sun, is the medium through which our prayers are carried. This eagle allows us to bring home to our villages, her children so that we can look forward to the continued success of having a way to have our prayer delivered.
>
> When we receive these young eagles at their places of birth, we bring them home and honor them as a Hopi child is honored. The hair is washed, a name is given, and a home is prepared where the eagle is cared for daily. Fresh meat is fed to the eagle every day. His water source is always plenty.
>
> Then when we hear the voices of these eagles in our villages, we understand that they are helping to bring rains to our fields. They are calling out to the clouds to come and shade us. They are calling out to the clouds to come and shade us and sprinkle their cooling waters on all of us. And we have faith that those eagles, our fathers too, will help bring rains to us.

Joshevama, Wilmer

1993 Hopi Delegation Takes River Trip. *Hopi Tutu-veh-ni* 11(100):6.

Joshevama reports on the research trip the Hopi Cultural Preservation Office undertook from September 30 to October 8 as part of the Glen Canyon Environmental Studies. The Hopi delegation accompanied National Park Service employees during this nine day trip.

Joshevama describes that the delegation,

> ... returned to the Hopi mesas on October 8, tired and relieved but also feeling good that they had made a small but significant impact on the Park Service with their contribution. The purpose of the trip was to get an introduction to various archaeological sites in the canyon and to document as well as identify plants and current cultural use areas.

The Hopi delegation consisted of Leigh Jenkins, Director of the HCPO; Wilmer Joshevama, HCPO Research Assistant; Mike Yeatts, HCPO Archaeologist; T. J. Ferguson, HCPO Ethnologist, Institute of the NorthAmerican West; Harlan Williams and Walter Hamana, Cultural Resources Advisory Task Team members; Bradley Balenquah, Orville Hongeva, and Fred Koruh.

Joshevama further reports that,

> The most significant moments of the journey included a monitoring visit to Sipapuni and the Salt Mine. Areas which were of immediate concern to the park service were the erosion of soil caused by the fluctuation of water being released by the Glen Canyon Dam. This erosion presents a danger to ancestral Hopi sites located within the vicinity of the river, in some areas causing large arroyos to form and further damaging these valuable archaeological sites.
>
> On one day the group was introduced to a pair of digging sticks located within a crack in the wall. They had initially been identified and recorded as bow and arrows by the discoverer. However, upon examination by the Hopi team, everyone agreed that they were digging sticks along with a small bundle of bamboo reeds. This was an excellent example of how collaboration with park service archaeologists can benefit both parties.

Other research taking place concurrently with Hopi field work on the trip included water quality testing, trails maintenance, and archaeological site monitoring.

Joshevama concludes by noting that the Environmental Impact Studies is winding down and the next phase of involvement the tribe is seeking is long-term monitoring in the canyon working closely with the Grand Canyon National Park and the Bureau of Reclamation.

Kaiser, Rudulf

1990 Prophecies and Eschatological (Millennial) Traditions of the Hopi-Indians in Arizona. *Anthropos* 85:65-71.

At the title indicates, this article describes Hopi prophecy, concentrating on the period following World War II. Kaiser describes and illustrates a petroglyph at "Prophecy Rock," which he says was completed between 1890 and 1905. Kaiser observes that even relatively recent petrogylphs such as this one are difficult to interpret. He says (p. 69),

> But the rock drawing is not understood and interpreted in the same way by all Hopi. Some Hopi do not share some of the items in the foregoing interpretation. And many of them point out that each interpretation of the drawing is subjective, nobody knowing for certain what was in the mind of the person who made the drawing.

Katchongva, Dan

n.d. *Hopi, A Message for All People*. White Roots of Peace and Akwesasne Notes, Mohawk Nation, New York.

Dan Katchongva is described as the son and successor to Yukiuma. In this publication he provides accounts of Hopi origin and migration, the history of Oraibi and Hotevilla, and Hopi prophecy.

In the course of recounting the emergence and migrations, Katchongva (p. 9) says that Masaw gave the Hopis "... instructions according to the way they were to migrate for a certain purpose to the four corners of the new land, leaving many *footprints, rock writings,* and *ruins,* for in time, many would forget that they were all one, united by a single purpose in coming up through the reed."

He (p. 10) adds, "We migrated for many years to every corner of this continent, marking our claim as we travelled, as these markings clearly testify up to the present day. On our way we stopped for a rest near the great river now known as the Colorado." The Bow Clan leader left in search of the Earth Center, which he found and where he succumbed to temptation. He soon died and his two sons continued, the older one leaving for the east.

The younger brother and his people continued to search for Masaw (p. 11), "On their way they came to a land that looked fertile and warm. Here they marked their clan symbols on the rock to claim the land. This was done by the Fire Clan, the Spider Clan, and the Snake Clan. This place is now called Moencopi."

Katchongva continues the narrative up to Hopi prophecy as understood in the 1970s.

Katchongva, Dan

1972 *From the Beginning of Life to the Day of Purification.* Translated by Danaqyumptewa. Traditional Indian Land and Life, Los Angeles.

The text of this pamphlet is virtually identical to that of *Hopi, A Message for All People* published by White Roots of Peace and Akwesasne Notes.

The subtitle accurately states, "Teachings, History, and Prophecies of the Hopi People as told by the late Dan Katchongva, Sun Clan, (Ca. 1865-1972)."

The introduction to the pamphlet notes that the text is based on a tape recorded talk Katchongva gave on January 29, 1970, with some additional statements concerning the Coyote and Grey Eagle clans added at Katchongva's direction.

Kelsey, Michael R.
1991 *Canyon Hiking Guide to the Colorado Plateau.* Kelsey Publishing, Provo, U

In describing the trail down Salt Trail Canyon, Kelsey states (p. 272), "This la
route is the way the Hopi people reach the canyon to gather salt and to visit ceremo
sites such as their Sipapu and old burial grounds. Hopi and Navajo alike told the aut
that no one would mind if whites visited the area, as long as they didn't disturb the sites

Kennard, E. A.
1937 Hopi Reactions to Death. *American Anthropologist* 39(3):491-496.

This short article combines insights into Hopi culture with descriptions of how Hopi people variously react to death. Kennard (p. 491) begins with the observation that "The Hopi regard life as predetermined in all important respects."

He observes (p. 491) that "In every ceremony, the spirits of the dead are involved, whether as katcina, clouds, or those living in the underworld." Even wedding garments are made for a bride to give her clothing for the future life. Kennard (p. 492) adds, "Despite this preoccupation, there is the greatest reluctance to speak of the dead, the underworld, or even to identify the katcina with the dead. A man is buried with a 'cloud mask' of cotton batting, but discussion of the subject is avoided."

Kennard (p. 492) explains that "The psychological reason for this reaction is related to ideas concerning the role of will in human life." Hopis believe they should concentrate on keeping happy, healthy and arriving at old age and live their lives without mental conflict, worry, or trouble. He points out (p. 492-493),

> A man who thinks of the dead or of the future life instead of being concerned with worldly activities is thereby bringing about his own death. In folklore are tales of people who wonder about what happens to the dead and are given the opportunity to visit the underworld by magical means, and return to life to tell the people about it. In such tales the living are urged not be lonesome and not to long for the deceased.

Hopi reactions to death range from acceptance and resignation to anger. Kennard (p. 496) explains that all of these attitudes "... are intelligible and consistent with the great emphasis that Hopi culture places upon the role of individual will in what is otherwise a deterministic view of the course of human life."

Kennard, Edward A.

1972 Metaphor and Magic: Key Concepts in Hopi Culture and their Linguistic Forms. In *Studies in Linguistics in Honor of George L. Trager*, edited by M. Estellie Smith, pp. 465-473. Mouton, the Hague.

Kennard reviews what he considers to be the key concepts in Hopi language and culture by illustrating those elements of the lexicon that refer to them in various contexts. He (p. 469) notes that the Hopis share with other Pueblo peoples an origin account of emergence from the underworld, but points out the Hopi version is distinct in the emphasis it places on the Hopi's separation into groups that by various events acquired a clan name and identity during migrations before settling on the Hopi Mesas. He observes that the order arrival and direction of arrival of clans depends on the village where the account is related. Kennard (p. 469) thinks, "In comparative perspective it is apparent that the myths rationalize the current social organization of Hopi ceremonial life, and are not concerned with the local definition of exogamy."

Kennard (p. 469) thinks that the concept of predetermination is the "... fundamental idea underlying their cosmology, their assumptions about the universe, their obligations as Hopi, and what they perceive as threats to their individual and collective lives ..." He says, "What was determined in the beginning, at the time of emergence, and by agreement with Masawu, the owner of the Earth when they arrived here, is still the basic fact around which life revolves." Hopi speech in songs, formal addresses to Kachinas, and announcements use the same words and phrases repetitively, and rituals "symbolize in acts what is otherwise symbolized in words." Hopi rituals, especially at the Soyalangwu in December, "magically" enact in advance the important events of the coming year (e.g., ceremonies, dances, and the time of planting) "... in the hope these performances will determine their success and prosperity throughout the coming year."

Kennard (p. 469) notes the Hopi word for "magically predetermining" future events is *pasiwna*. He (pp. 469-470) observes, "In the same sense *pasiwna,* the destiny of the Hopi was determined from the Beginning, and is still being unfolded generation by generation. This is the well-known Hopi way or Hopi road, always symbolized by the path of white cornmeal stretching to the East. Write small, each individual Hopi has his own path of life laid out for him, and as he lives, whatever happens to him is thought of as predetermined (*pasiwna*) and he cannot change it."

?a?ne himu is the Hopi word for supernatural (p. 470). This combines the free morpheme *?a?ne,* which signifies something done with maximum effort, with *himu,* which signifies "something." Kennard says, the semantic range of the term *?a?ne himu* thus refers to "that which is powerful but unknown." He observes, "It is by adhering to the dictates of tradition and controlling that which is powerful but unknown that life is fulfilled."

Knowing the referents used in all ceremonies and rituals helps to understand the Hopi conceptualization of the universe (p. 470). *Tawa* (the Sun) is always referred to as *itana* ("our father"). In *tuchwa* (the earth) there lives *muyingwu,* a god of germination

who makes all living things grow. Each of the six directions has a chief or leader who has the power to send clouds and rain, and they are addressed as *itanamuy* ("our fathers") or collectively as *nananivo* ("in all directions").

The soul or non-mortal part of Hopi people is identified with the breath (*hikwsi*). Kennard (p. 470) observes, "Hence one breathes his prayers on *homngymni* 'sacred cornmeal' before he sprinkles it, upon prayer feathers (*nakwakowosi*), and upon prayer sticks (*paho*). In parallel fashion, when the gods pick up the sacrifices they just inhale their essence and leave the material manifestation untouched."

There is a large lexicon dealing with corn as a metaphor for aspects of life and death (pp. 470-471).

Kennard (p. 471) notes that during Tribal Initiation ritual, the neophytes are called *kele* (sparrow hawk). When initiates are named during this ceremony they are referred to as *hoyyani* ("to be ripe or full grown"), the same term used for birds when they reach the stage that they can fly from the nest or to animals that are weaned and can function without their mothers.

Kennard (pp. 471-472) refers to the "living on-going process" of *navoti* by stating,

> Another theme that runs through much of Hopi thought and behavior is what I shall call the distinction between appearance and reality. The basic assumption seems to be that things are rarely what they seem. When they recite tradition, they always qualify by saying that this is what has been passed down to us, but much has been forgotten. Since everything that is going to happen is presumed to be known and part of the Hopi instructions, the problem arises intermittently as to whether some event today ... is what is referred to in tradition. And each individual and each clan, and each village, has its own interpretation of what tradition foretold. Interpretation is referred to as *navoti?at* 'his hearing or understanding'. Like all prophecies and forecasts of the future, they are sufficiently vague so that a certain amount of interpretation is essential in fitting today's events into the pattern of tradition.

Kennard (p. 472 also notes that,

> All White men are called *pahana*. In tradition the *pahana* is the elder brother of the Hopi who traveled east, but is later to reappear and aid the Hopi in the solution of all their problems. So today in all dealings with White men — friends, the government, or any other, the question always arises as to whether this is truly (*?anca*) the *pahana* of tradition.

King, William R.

1987 Dionysos Among the Mesas: The Water Serpent Puppet Play of the Hopi Indians. *American Indian Culture and Research Journal* 11(3):17-49.

In this discussion of drama as a means of exploring Hopi culture, author, King, refers to Hopi as an "'authentic culture'" in the sense that (p. 18):

> The Hopi have never separated the arts and the life of the spirit from the other aspects of daily life. Such a holistic outlook gives great strength to a culture, since it provides a unified belief system into which all experience can be integrated. It provides an open channel by which the nourishing resources of the spirit can be made accessible to the immediate needs of the community and the individual.

This assessment provides a clear image for both describing and comprehending the ongoing relevance of the Grand Canyon in Hopis' world view.

In describing the location of the Hopi puppet plays, King offers a brief discussion of the role of the kiva in Hopi life and spirituality. He explains that (p. 26):

> In the floor, directly below this entrance, is the sipapu or world navel, an orifice which represents the point of entry to the underworld. In its physical form, the Kiva is an ideogram of the path of human emergence into the present Fourth World, up out of the previous three, which are conceived as being nested within one another. Its location within the earth is extremely important, as John Lansa, a Hopi leader, explains:
>
> > "We sit here in the Kiva which is a womb in the Earth. This Kiva is our church and our school. Here in the Kiva is where our leaders work. In here we have our ceremonials, here in the Earth so that Nature will work in harmony with people. When we have ceremonials, this keeps the natural forces together" (Jack Loeffler (ed.), *Myths and Techno-Fantasies,* 1971, p. 11).

Kipp, William Ingraham

1869 "The Last of the Leatherstockings," *Overland Monthly*, vol. 2, no. 5, pp. 401-412.

This is an absurdly romantic eulogy for what Kipp sees as the vanishing world of the Wild West. He believes that this world full of Cooper's *Leatherstockings*, missionaries, grizzly bears, Indians, beavers and more, is hopelessly receding behind the onslaught of civilization. The Hopis (referred to here as Moquos) are listed "among 'the things that were (p. 410),'" According to the author, their peril arrived in the form of smallpox.

This premature signal for vacated Indian lands in the West is embellished by romantic tales of the Hopis. Bill Williams' and a Mr. Blount's stay among the Hopi are both recounted.

Kotchungva, Dan

1938 The Tradition of the Hopi Lands, Presented by Dan Kotchungva, Chief of Fire Clan, Hotevilla, and Spokesman of Meeting of Hopi Chiefs. Typescript of ms. on file at Wilmington Federal Records Center, Bureau of Indian Affairs, Field Records, Navajo Service, Window Rock, Arizona. FRC No. 72920, File 080. [Introduced as Defendant Exhibit 491, Healing v. Jones, USDC, Civil 579, Prescott.]

This information in this archival document was collected by Gordon MacGregor, an anthropologist with the Bureau of Indian Affairs, who met with Hopi leaders several days after those Hopis met with John Collier, the Commissioner of Indian Affairs. The meeting with Collier took place on July 14, 1938.

The document was created by five Hopi leaders to record the tradition of Hopi lands. Dan Kotchungva acted as the spokesman, but the document was authorized with the signatures or thumbprints of Poonayowma (Kikmongwi of Hotevilla); Charles Homihongva (Kikmongwi of Shipaulovi), Andrew Hermaquaptewa (Chief of Bluebird Clan, Shungopavi); Skayumptewa (Chief of Shungopavi); John Talashoma (Vice Chairman of Moencopi Village Council); and Archie Quamala (Shungopavi); and Frank Tewanimptewa.

The Hopi leaders expressed their sadness over John Collier's explanation of the division of Hopi lands. They stated their intention to rely upon their own traditions to have Hopi lands set aside for the interest and satisfaction of the Hopi people. The Hopi leaders (p. 1) noted that "This is a vital and solemn thing to us, not to be achieved in a short time."

The Hopi leaders refer to the stone tablets that comprise a physical proof of their traditions, and discuss their responsibility for presenting the traditional knowledge concerning Hopi land rights. The Hopi leaders state (p. 1-2),

> We cannot recognize any division of the lands we claim not traditionally. We must have all our land according to tradition and to the stone maps. It must follow our traditional boundary and divide none of the land inside of it. According to this map, the land of the Hopi people is in the center of a great body of water. All the land surrounded by water in the world of the Hopi. We Hopis are not originally of this land, we came here to a being who is Masawa. It was arranged by Masawa, that the Hopi should lay claim to their land by this stone, maintain their land and benefit by it in future years. Now after this was arranged the White people came and divided the land, putting the Hopi inside it, i.e., within a reservation. Now this division of the land by the White people is against our tradition. We do not wish this division, and so according to the tradition of things to come, we are opposing you and laying claim to the original Hopi land.

This action is taken by the chiefs themselves, as tradition says they should, who now present the traditional knowledge concerning our land rights. We do not wish to see any hindrances brought about. This is a very real issue in the sight of the Hopi people, which we wish carefully considered ...

This is in the meaning of this tradition or prophecy concerning the Hopi people and the land. By means of this ancient stone record, which the chief of Hotevilla has in his possession, the future Hopi will benefit. But the record must be used properly. Oraibi, too, has such a stone map ... It is the tradition of the Hopi that with the presentation of this stone to claim the Hopi land, and the return of the Hopi's rightful country, that no future harm or detriment should come to them or to their land. It is traditionally stated that with these things will come a new era of peaceful life to the Hopi people.

Although these two chiefs of Oraibi and Hotevilla have two stone records they are for the same purpose. The stone record in the possession of the Hotevilla Chief has one meaning and the stone record of the other Oraibi Chief has another meaning. They are the only things we have to rely upon to prove our traditional claim to the land and gain our ends, now that the Government has divided up our country. They are the means according to our tradition. If the chiefs do not make a mistake and present the claims as given through these stone maps, according to our tradition, a new era for the Hopi will come when all the resources of the Hopi land shall be divided equally between them and their White brother. Whoever is living at this time shall equally receive the benefits and equally enjoy the privileges that come from the land, and no one from outside shall encroach upon the land.

All this tradition as we know it, is also understood by our White Brother, whoever it is. He has in his heart the same beliefs and purposes and his intentions in dealing with the Hopi people are those which our tradition tells us shall be. For according to this tradition, the Hopi and his White Brother agreed when they first traveled together across the land, that they would meet again, White Brother returning from the east, and restoring to the Hopi their land.

Laidlaw, Robert M.

1975 *Functional Aspects of Secular Origin Myths.* MA Thesis, California State University, Fullerton.

This thesis analyzes five versions of the "secular" Hopi origin myth. Three historical versions of the origin myth recorded by Cushing, Voth, and Titiev are compared to two contemporary versions by Banyacya and Talahabtewa. The two basic hypotheses investigated are: (1) characterization in the origin myths is not random but correlated with the subjective interest of the orator, and (2) popular versions of the origin myth operate as a warrant for factional group ideologies on topics involving political and religious polarization (pp. 5-6).

Laidlaw (p. 3) observes that there are four integral elements to the Hopi origin myth: (1) specification of the evil that brought about emergence from the underworld, (2) an outline of authority, (3) specification of clans, clan powers, and ceremonial distribution, and (4) prophesy.

Laidlaw relates the recent versions of the origin myth to factional Hopi politics dealing with a strip mine at Black Mesa and Tribal Council politics.

Laidlaw quotes from a document prepared by Hopi religious leaders as part of litigation to stop the strip mine at Black Mesa. In part, this document says (p. 49),

> The area we call "Tukunavi" (which includes Black Mesa) is part of the heart of our Mother Earth. Within this heart, the Hopi has left his seal by leaving religious items and clan markings and plantings and ancient burial grounds as his landmarks and shrines and as his directions to others that the land is his ...
>
> Hopi clans have traveled all over the Black Mesa area leaving our sacred shrines, ruins, burial grounds, and prayer feathers behind.

Lavender, David

1982 *Colorado River Country*. New York: E. P. Dutton.

This is a biased, but fun-to-read account of the history of the Grand Canyon. The author, Lavender, is truly engaged in his subject which causes him to glorify some events; but anyone who has seen the Grand Canyon can have some sympathy for his tendency to wander into hyperbole over such an awesome spectacle.

Lavender treats the history of Grand Canyon exploration fairly extensively throughout his work. The Spanish Entradas of Coronado, Espejo, Onate, Escalante and Garces are the material of chapter three. The American exploration phase up to and including J. W. Powell's trip through the Canyon fills the next eight chapters.

In a short summary of the anthropology and archeaology of the river canyon, Lavender refers to the symbolic sipapu which is often found in the floor plan of a kiva. He explains that the sipapu is "a small hole symbolic of the passage through which the first people were believed to have emerged from the underworld (p. 9)."

Lesley, Lewis Burt

1970 Uncle Sam's Camels: The Journal of May Humphreys Stacey Supplemented by the Report of Edward Fitzgerald Beale. The Rio Grande Press, Inc., Glorieta, New Mexico. [Originally published in 1927.]

During his railroad survey of the 35th parallel, Edward Fitzgerald Beale came to Hopiland, but never actually approached the Hopi Mesas or met the inhabitants. During his travels through the region he mentioned passing a trail which, it seems possible, linked the Hopi villages to the Little Colorado River (p. 198). This trail was approximately 17 miles west of Leroux Wash. Beale said, "We passed this evening a large Indian trail going to the north. It seemed about a week old, and we supposed it to be of the Ganoteros, with whom we have been and are at war."

Lesley, Lewis Burt

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During his railroad survey of the 35th parallel, Edward Fitzgerald Beale came to Hopiland, but never actually approached the Hopi Mesas or met the inhabitants. During his travels through the region he mentioned passing a trail which, it seems possible, linked the Hopi villages to the headwaters of the Little Colorado River (p. 198).

Livingston, Dewey

1992 *History of the Painted Desert Inn, Petrified Forest National Park, Arizona.* Part of Package 199, Historic Structure Report, National Park Service, Denver Service Center. Unpublished ms. dated April 1992 on file at Petrified Forest National Park, Arizona..

This history of the Painted Desert Inn in the Petrified Forest National Park describes a mural by the Hopi artist Fred Kabotie that depicts Hopi salt gathering expeditions to Zuni Salt Lake. These expeditions were similar in many ways to Hopi salt pilgrimages to the Grand Canyon.

Mary Elizabeth Colter, architect and designer for Fred Harvey Company, and designer of the Hopi House at the Grand Canyon, began work on the Painted Desert Inn in 1947 (p. 56). Colter hired Fred Kabotie, a well-known Hopi artist from Shungopavi, in 1948 to paint murals. The largest mural is an interpretation of "the Hopi legend about the ceremony of young men traveling to gather salt" (p. 58). The salt mural was the only one signed by Kabotie (p. 61).

At the dedication of the Kabotie Room at the Painted Desert Inn on June 23, 1976, Fred Kabotie's interpretation of the mural was recorded. Kabotie (pp. 59-61) explained,

> I had been thinking over what subject I should do, when it occurred to me that the Hopi people (from the Hopi villages) used to travel right through this country to go after their salt, which was somewhere between St. Johns and Zuni Pueblo.
>
> There is a big lake there, the Salt Lake, where the Hopi have been getting their salt for their own use. Salt is very, very important, no matter where, as a part of the diet of food. To get this salt of theirs, the Hopi really make a big ceremony out of it. Those who are volunteered to go for the salt get the salt for their aunts (on their father's side, according to Hopi customs). When they go from home they take food that their aunts have prepared for them to take along. On their way to the Salt Lake, they encounter many other things, sometimes they come across a bear, and here and there they ran across antelopes. They spend at least one night out before they reach the lake.
>
> The boys saw the lake, and coming near it they make a war path or a war entrance. They yell and run toward the lake, yelling like warriors. I don't know why they do that, but when it is done they step right into the lake. Sometimes, the lake is pretty shallow, sometimes it is up, and it all effects the nature of the salt that day. If it's pretty good they go right in and stoop down and get the salt from way underneath. They fill up their salt bags, and they may possibly spend another night there, then come back to the

Hopi villages by way of Zuni. They always talk about going to Zuni Pueblo, and from there they can come back home.

On their way, water is very important. In waterholes, the boys may see and encounter some wild animals ...

When the boys get near home, the Hopi Villages, they stop and build a fire to signal they are coming. Then the village people, especially the aunts of the boys (now a man) can get ready to receive them. They must get up early in the morning, not just anytime in the day. When they get up on the mesa, their aunt feeds them at the edge of the foot trail on top, and leads them to their homes. When they get into their homes, their aunts wash their hair, and give them new names. These names have something to do with friendship.

And that's the way the Hopis have been getting their salt from these salt mines for centuries. But now they don't do that anymore, because they can get all their salt from the supermarket.

Lockett, Hattie Greene

1933 *The Unwritten Literature of the Hopi*. Tucson: University of Arizona.

Throughout this work Hattie Lockett continuously reiterates her belief, which she clearly states at the beginning of the text, "that the present-day social organization of the Hopi is the outgrowth of their unwritten literature (p. 5)." Although this is most certainly true, Lockett contributes little to ascertaining this connection. Much of her work is based on other people's observations, namely, J. W. Fewkes, P. E. Goddard, Walter Hough, H. R. Voth, and Clark Wissler, among others. Perhaps the most one can say for this published Masters thesis is it puts these others' works into a concise format.

Lockett mentions some varied use of eagle feathers in Hopi rites and practices. For instance, they are placed on the four corner stones of any Hopi home and inserted in one of the central roof beams (p. 26).

A potentially interesting and useful statement is unfortunately lacking a citation or any substantiating evidence, but Lockett asserts (p. 33):

> Without books and without writing the Hopi have an extensive literature. That a surprising degree of accuracy is observed in its oral transmission from generation to generation is revealed by certain comparisons with the records made by the Spanish explorers in the sixteenth century.

Lockett emphasizes the pervasieness of rituals and ceremonies in Hopi life. She quotes E. L. Hewett to do so, writing: "There can be no understanding of their lives apart from their religious beliefs and practices. (p. 37)." Using this as her point of departure, Lockett embarks on a discussion and description of important ceremonies in the Hopi year.

We begin with the Wu-wu-che-ma ceremony. After offering a brief account of the Hopi origin myth based on the emergence of the human being through the sipapu from the underworld, Lockett describes the corresponding ceremony. She reports (p. 40):

> Once every year the Hopi hold an eight-day ceremony commemorating this emergence from the underworld. It is called the Wu-wu-che-ma, occurs in November and thus begins the series of Winter festivals. Four societies take part, and the Da-dow-Kiam and Mocking Bird Society opens the ceremony by singing into the kiva of the One-Horned Society this emergence song, the very song sung by the mocking bird at the original emergence, according to Voth. This ceremony is a prayer to the powers of the underworld for prosperity and for germination of new life, human, animal, and vegetable. Fewkes called this the New Fire Ceremony, and in the course of the eight-day ceremonial the kindling of new fire with the primitive firestick does take place. But it is not hard to feel a close relation between the idea of fire and that of germination which stands out as the chief idea in the whole ritual, particularly in the subtle dramatization of the underworld life and emergence as carried on in the kivas, preceding the public "dance" on the last day.

A few pages later Lockett explores more extensively the details of the Hopi origin myth through the sipapu. She follows this with a discussion of the ensuing clan migrations from the emergence, through their journeys to the Mesas in Arizona where Hopis have now lived for hundreds of years (43-45).

Directly following her account of the Wu-wu-che-ma ceremony, Lockett refers to the added use of the sipapu as the place through which people return to the underworld upon their death (p. 41). Lter in the text she picks up this topic again and explains more thoroughly Hopi beliefs about the afterlife of their deceased. Citing P. E. Goddard's account of Hopi burial practices Lockett includes this quote (p. 76):

> "When an adult dies, the nearest relatives by blood wash the head, tie a feather offering to the hair so that it will hang over the forehead, wrap the body in a good robe and carry it to one of the graveyards which are in the valleys near the mesas. The body is buried in a sitting position so that it faces east. This is done within a few hours after death has occurred. The third night, a bowl containing some food, a prayer-stick offering, and a feather and string, are carried to the grave. The string is placed so that it points from the grave to the west. The next morning, the fourth, the soul is supposed to rise from the grave and proceed in the direction indicated by the string, where it enters the 'skeleton house.' This is believed to be situated somewhere near the Canyon of the Colorado."

In addition to the Wu-wu-che-ma ceremony, Lockett also discusses in some detail the Snake Dance Ceremony and its basis in the story of Tiyo (p. 55). As the legend goes, a young man named Tiyo from a place of little rain, known as To-ko-na-bi, went in search of rain. His query of where the water went led him to the Grand Canyon. Here, Tiyo met the Snake Chief who taught him the secret rites for bringing rain. From this legend come the prescriptions for the Snake Dance Ritual.

The Little Colorado River also finds its way into this unwritten literature of the Hopi. Two stories which Lockett relates in the final part of her book, take place, atleast in part, at "Bayupa"-- The Hopi name for that river. These stories are "The Coyote and the Water Plume Snake (pp. 87-8)" and "The Coyote and the Turtle (pp. 97-8)."

Loftin, John D.

1982 *Emergence and Ecology: A Religio-Ecological Interpretation of the Hopi Way.* Ph.D. dissertation, Department of Religion, Duke University.

Loftin interest is to demonstrate the "religio-ecological" character of the Hopi mode of being as a hermeneutic. He reveals that for the Hopi ecology embodies a religious dimension, while religion embodies an ecological dimension, by examining Hopi modes of subsistence, rites of passage, social structure and ceremonies. He finds that the Hopi are still undergoing changes due to contact with the dominant Western culture, but they have "nonetheless continued to embody the religio-ecological essence of the aboriginal orientation to the world" (p. iii).

Loftin observes on p. 29, "... for the Hopi, the religious universe is the world as it is perceived around them. The world is their religious world so that their religious expressions take their form from the phenomena that reveal themselves to the Hopi within their sacred landscape."

In a footnote on p. 30, Loftin agrees with Titiev's (*Old Oraibi,* p.197) observation that "the most fundamental concept of Hopi religion is a belief in the continuity of life after death"

Loftin's study is primarily devoted to data devoted from Third Mesa (p. 31).

Loftin describes the Hopi pilgrimage for salt on pp. 114-124, using published sources, i.e., Stephen (*Hopi Journal),* Talayesva (*Sun Chief*), Titiev (A Hopi Salt Expedition), Beaglehole (*Notes on Hopi Economic Life*), Fewkes (The New Fire Ceremony at Walpi), and Voth (The Oraibi Soyal Ceremony). He describes the basic sequence of activities and shrines visited during the ceremony, largely drawn from Talayesva's account, and does not add any new ethnographic data. Loftin (p.114) asserts "the Hopi obtained their salt from deposits found in a cave in Marble Canyon close to the Grand Canyon." He also states that "the last journey there was made in 1912, and since then some salt has been obtained from the salt lake forty-two miles south of Zuni." Loftin notes that later journeys to the Zuni Salt Lake embodied some of the same religio-ecological features, "such as the depositing of prayer offerings at the shrines of Spider Woman and the Twin War Gods."

Beliefs about death and burial practices are described on pp. 189-204, again drawing primarily on published ethnographic sources. In a footnote on p. 192 Loftin states, "... though the Hopi basically feel that the souls of the deceased travel west to the *sipapu* where they descend to the world of spirits, they are hardly certain." On pp. 194-195, Loftin asserts the Hopi "place the corpse in a sitting position facing the east" since that is the direction the sun rises.

On p. 450, Loftin cites the 1951 statement that Shungopvai leaders submitted to the Commissioner of Indian Affairs to outline the boundaries of Hopi traditional land. This statement includes the point that "It is upon this land that we made trails to our salt supply."

Loftin concludes his dissertation with Emory Sekaqupatewa's observation (in Hopi Indian Ceremonies, p. 42) that Native Americans cannot explain their sense of harmony with nature in analytic or scientific terms. With regard to this, Loftin (p. 459) points out "Our Hopi friend was pointing to an important fact: Western civilization created its own religio-ecological problems and thus cannot gain insight by projecting those problems onto 'an-other' who does not share them ... to do so is to continue to embody the 'primitive/civilized' structure which led to the problems in the first place."

Loftin, John D.

1986 "Supplication and Participation: The Distance and Relation of the Sacred in Hopi Prayer Rites," *Anthropos* (81), pp. 177-201.

In this article, Loftin clearly and cogently argues that Hopi prayer rites are characterized not by some passive, supplicatory relationship to an omnipotent, supernatural agent, but rather by an active, participatory relationship between the practitioners of the rites and the spirits who provide the life-sustaining elements of the natural world.

Lftin explains that his analysis of the function of prayer rites is in distinct conflict with.the readily-accepted, anthropological thesis espoused by James George Frazer in his well-known work *The Golden Bough* (citations from this work will refer to the 1922 abridged edition). Frazer's thesis is based on the assumption that there exists a clear distinction between magic and religion. Loftin's effort is to disabuse his reader of this supposed bifurcation and to demonstrate through a discussion of Hopi rituals that both supplication and participation exist simultaneously in prayer rites. Loftin explains: "My purpose here is to demonstrate that the many 'magical' rites of the Hopi are, to the contrary, quite religious in character in that they presuppose a sacred 'other' with which they communicate by supplication and participation (p. 179)."

Loftin employs great skill in his analyses of some complex dimensions of Hopi spirituality and practices. He explores five distinct categories. 1. Magic and the Hopi 2. Spiritual Substance and Smoking for Rain 3. Spiritual-Material Undergirdings and Interrelationships 4. *Paaho* 5. *Salavi* 6. Hopi Racing. Below is a brief and general review of these categories. My intention here is to do no more than pique the curiosity of any who care to probe these interesting explorations of the process of how Hopis order and understand their world through spirituality.

Loftin explains that "prayer for the Hopi is not so much a matter of thinking by analogy as it is a mode of reciprocity between Hopi deities and Hopi (p. 180)." Fulfilling the terms of this reciprocal relationship depends on Hopi being able to achieve a "harmonious union of physical and psychical dimensions (p. 185)" in their acting out of prayer rites. In fact, when the Hopi perform the prescribed physical act associated with a distinct ritual they must do so with a good heart if they hope to be successful in creating the object of their relgious act. This is not wholly a passive, wishful experience, but one in which Hopi behavior and thoughts are pivotal in procuring results. An actual union between the Hopi and the spirits must ensue to fulfill the prayer rite. "One Hopi stated that when a Hopi participates in a *katsina* dance," for instance, "'he loses his identity and actually becomes what he is representing (Emory Sekaquaptewa 1976: 39; in Loftin, pp. 187-88.)'" Loftin sums up this aspect of Hopi supplication and participation with this statement: "the Hopi do not perceive the material dimension of the cosmos apart from the spiritual. The material and spiritual aspects of the world form an irreducible, paradoxical totality (189)." In other words, Loftin explains: "To will an event is to participate in its manifestation, while to wish for an event is to hope that it will take place. In prayer, the Hopi wish and will simultaneously (p. 194)."

Although it is not the expressed intention of this work, Loftin's use of some specific examples in his analysis of prayer rites indirectly documents Hopis' spiritual connection to the Grand Canyon. For example, it is important to note that these Hopi prayer rites, with which Loftin deals, find their origin in the Grand Canyon. It was there that the ancestors "revealed to the Hopi in the Beginning, when all life and forms emerged from the *sipaapuni* (p. 191)," the proper preparation of prayer offerings. Loftin, at another point, explains: "The Hopi cosmology tells how the Hopi, after gestating in the womb of Mother Earth, emerged through the womb of the earth (*sipaapuni*) in the 'long ago' (p. 183)." According to Hopi, this place of emergence, the *sipaapuni*, is found at the confluence of the Little Colorado and the Colorado rivers in the Grand Canyon of present-day Arizona.

Loftin's discussion not only documents the role of the sipaapuni , but also demonstrates its very fundamental role in Hopis' worldview and survival. He writes (p. 197):

> After the first Two Heart emerged from the *sipaapuni* he brought death to the Hopi. Death upset the Hopi, who then decided to send the witch back down the *sipaapuni* from which he came. However, the witch told the father of the deceased child to look down into the underworld and there the father saw his child alive and playing a game. The witch said death is not final and is indeed necessary to transform humans into purely spiritual beings, from which comes more life. Thus, the Hopi decided to let the witch remain for they felt his evil was a necessary component in the maintenance of the world. In other words, though the Hopi seek rain, fertility, long life, and good health in this life, they recognize also that life springs from death and thus they accept ultimately the presence of death in the world.

This pervasive significance of spirituality to the Hopis' survival and maintenance of their own way of life is articulated by Loftin at other points of this article and on many different topics. In reference to Hopi initiation rites, Loftin remarks that, "one of the primary purposes of the early Hopi initiations is to introduce young Hopi to the understanding that a spiritual essence undergirds the material world (p. 184)." In relation to this observation, Loftin exploring the meaning of nature to the Hopi, writes: "Nowhere in Hopi religion have I found any ritual that embodies 'faith . . . in the order and uniformity of nature' (Frazer 1922: 56). In actuality, the Hopi address their world with prayers precisely because they do not take for granted cosmic events such as the movement of the sun, rain, crop growth, fertility, and long life (p. 197)."

Lomahaftewa, Viets

1933 Letter from Viets Lomahaftewa to Senate Subcommittee on Indian Affairs, February 27, 1933. Plaintiff's Exhibit 337, Vernon Masayesva, etc. Plaintiff, v. Leonard Haskie, etc., Defendant, v. Evelyn James, etc., Intervenor, Civil No. 74-842 PHX-EHC, United States District Court for the District of Arizona.

In this letter, Lomahaftewa explains that Chimopavy (Shungopavi) is the "first village" with the "tradition of the land reposition." He describes Hopi land, stating,

> I will now point out where the Hopi Indians claim as their said boundary line supposed to be. Starting from the north called Do-go-na-vie by Hopis in the cliff of Colorado River follow the river down to Salt Canyon, from there along west side of Flagstaff through Blue Ridge to Mt. called Pe-heg-ha form there to Woodruff there turning eastward covering Petrified Forest to Mission Spring from there back to Do-go-na-vie. This is the original boundary line for the Hopi Indians which has been told from generation to generation, so therefore we can never forget what our ancestor have told us and this is the very thing that has been put before the Senators at Washington Office sometime ago by Mr. M. W. Billingsley and his tribesmen who is the interpreter for the Hopi Indians.

The letter is signed by twenty-five men.

Lomatewama, Ramson

1983 *Silent Winds, Poetry of One Hopi.* Badger Claw Press, Flagstaff, Arizona.

This collection of poems includes one titled, "Contemplating Death (written at the Grand Canyon)." This poem describes looking into the Grand Canyon and wondering when the poet will make his journey, who will be the first to greet him, how long he will have to travel, where he will begin, and what he will say when he arrives. After wondering these things, the poet says to himself to "Be patient. The time will come for you to make the journey."

Lomawaima, Hartman

1989 Hopification, a Strategy for Cultural Preservation. In *Columbian Consequences*, Vol 1., edited by David Hurst Thomas, pp. 93-99.

Lomawaima describes several of the strategies the Hopis have used to preserve their culture as they have been confronted with external influences. These strategies range from assimilating of ideas into a Pueblo cultural pattern to the drastic measure of destroying Awatovi.

Lomawaima discusses the Hopi concept of *Maski* on p. 97. He says,

> It is difficult to know precisely what foreign concepts entered Hopi life as a result of contact with other native populations or missionization. The Hopi concept of *Maski*, or Land of the Dead, has been misinterpreted as a kind of purgatory or hell (Courlander 1982:xxi), but *Maski* has no punitive connotation for Hopis: It refers to the destination of souls when they leave the present world. If *Maski* was derived from an introduced concept it has certainly been imbued with Hopi values so that its origin is difficult to ascertain. Making the correct interpretation is all the more difficult for the outsider because of the secretive nature of Hopi religious institutions, which to this day are treated as the private property of individuals and collectives.

Lotenberg, Gail

1993 Documentary Evidence of Hopi Use of the Grand Canyon and Surrounding Region, 1540-1882. Institute of the NorthAmerican West. Ms. on file at Hopi Cultural Preservation Office, Kykotsmovi, Arizona.

This report was prepared as an "in-house" work product for use by Hopi researchers working on the Glen Canyon Environmental Studies project. It reviews the documentary history of Hopi use of the Grand Canyon region from 1540 to the time the first anthropologists arrived on the Hopi Mesas in the 1880s.

The documentary record indicates the Hopis knew how to reach the Grand Canyon from the Hopi Mesas and that there was a well-established trail network that the Hopis used to reach a number of locations on the Colorado River. Early accounts document Hopi traditions about the role of the Grand Canyon in Hopi religion, history, and prophecy. Historic accounts also attest to Hopi use of the Grand Canyon for economic purposes.

Lowie, Robert H.

1929 Notes on Hopi Clans. *Anthropological Papers, American Museum of Natural History* 30:303-346.

This article analyzes Hopi clans on First and Second Mesa based on data collected in 1915 and 1916. Lowie notes (pp. 331-332) that some clans at Hopi are linked into larger units termed phratries and that the components of these phratries vary from village to village. Lowie documents a total of twenty-four clan groups that primarily comprise matrilineal lineages.

Twelve clans or phratries were documented at Walpi and Sichomovi on First Mesa: Snake; Sand-Lizard; Cloud-Corn; Horn-Flute; Charcoal-Coyote; Rabbit; Butterfly; Badger; Reed; Eagle; *tepnamö*; and *asnömö*.

Fourteen clans or phratries were documented at Mishongnovi: Parrot; Katcina, Bear, Carrying-Strap, *Tcöu*, Cedarwood-Fire; Badger; Butterfly; Squash, Chicken-Hawk; Eagle; Corn; Cloud; Lizard.

Two clans were documented at Shipaulovi: Bear; and *Qálö*.

MacGregor, Gordon

1938 Letter from Gordon MacGregor to John Collier, Commissioner of Indian Affairs. Indian Claims Commission, Docket 196, Plaintiff's Exhibit 55 [Also Sekaquaptewa v. MacDonald, Civil No. 74-842, Prescott, Plaintiff's Exhibit 205].

This letter written by the anthropologist Gordon MacGregor reviews and evaluates Hopi "traditional claims" to land, especially as related to Navajo encroachment. MacGregor writes (p.1),

> In 1930 and 1933, the Second Mesa villages have presented maps outlining their conception of the Hopi country and asking for recognition of it. This boundary running along actual geographic points is not traditional, but I think, is the known geography of the Hopi. It includes the distant mountain peaks they can see from their villages and the farthest shrines, except those in the Grand Canyon to the west. The line also includes all but one or two ruins in central Arizona from which the Hopi clans believe they have migrated. This claim is the true Hopi country, and one which Second Mesa would like to have the Government formally recognize as the Hopi, rather than Navajo country. It is undoubtedly far more extensive territory than ever used by the Hopi. True, they went to the San Francisco Mountains for logs, to the Grand Canyon and Salt Lake, now in the Zuni country, for salt and beyond Navajo Mountain and far to the east and south to visit shrines or hunt eagles, but their old farm lands and most extensive range lands are far within these boundaries.

MacGregor notes that different villages and clans make traditional claims to different tracts of lands.

The traditional area of Sipaulovi is described (p. 1) as an area that

> ... commences with a shrine on Sunset Mountain, Navaqueawataka -- a butte just southeast of Sunset Mountain, along the upper side of Clear Creek, where the Sipaulovi eagle cliffs are located to Woodruff Butte, Chimontequi. There is no exact line, but these points mark the southern extremity of the area which this village considers its own territory.

MacGregor states (pp. 1-2),

> Mishongnovi village claimed no shrine except at Salt Lake, south of the Zuni Reservation in New Mexico. This is probably a special shrine used by all Hopi who went to this spot for salt and not a generally used religious shrine of any clan or society. The southern and western limits of this village's territory vary with clan ideas of their origin. One clan claiming migration from pueblo ruins around Jerome, Arizona, looks to this area as part of the Hopi territory. A definite western line of the village territory

> was said to run from the village southwest to tMontezuma's chair, a butte within the reservation, to the ruins near Winslow, then to Sunset Mountain area. On the east, the line ran to White Cone Peak, in the southeastern corner of the Hopi Reservation to Greasswood [sic] Springs and then southeast to Salt Lake in New Mexico. Their eagle territory is the same as that of Sipaulovi, along the upper edge of Clear Creek.

For First Mesa, MacGregor (p. 2) states,

> The First Mesa claim begins with White Cone Peak in the southeastern corner of their present reservation, runs northeast through Steamboat Canyon to the east edge of Salakai Mesa, thence north along the eastern and northern edge of Black Mesa passing through a shrine at Chichinbito Spring and Point, along the mesa edge forming Marsh Pass eastern escarpment, thence to Wildcat Peak just south of the northwest corner of the present reservation, thence southwest to Tuba Butte, thus incorporating Moencopi village, thence southeast along the Moencopi Plateau to Montezuma's chair, a peak just south of the central point of the south line of the present reservation, and thence east to White Cone Peak.

MacGregor (p. 2) notes that the First Mesa Hopis made an agreement with the Navajos about 1850 establishing a boundary line west of Ganado.

Several testimonies of Hopi people are summarized concerning Hopi claims to Moencopi. The account of Poli Naimkiwa (pp. 5-6) includes a statement that,

> It was during this time of farming at Moencopi, salt was found in the Grand Canyon -- where the Hopi believe they originated. The trail to this salt led through Moenave just west of Moencopi. Three miles below this place is a shrine where the Hopi salt parties stopped. In passing every member always put a sign of his clan in the stone there. This is about twelve miles from Moencopi. There were other points along this salt trail to the canyon where ceremonies were performed and which had their names, but only here did the Hopi write their clan signs.
>
> As to the eagle hunting territories it is hard to know how far they traveled. Each clan claimed the ground and eagle places back to the place from where they originated. These places are Navajo Mountain, the Grand Canyon, Flagstaff, Lukachukai Mountains and so on. These are traditional claims, but the distances were too far to retrace, so the Hopi have used eagle grounds nearer. These places are not those that mark the boundary of the land claimed, but show places of origin which are in traditional Hopi country.

Mallery, Garrick

1886 On the Pictographs of the North American Indians. *Fourth Annual Report, Bureau of American Ethnology.* Government Printing Office, Washington.

Mallery includes information in this work about G. K. Gilbert's topographical survey of the Colorado River region, which was never published previously. Possibly he obtained the information from an interview with Gilbert. Nonetheless, Mallery learned that Hopis traveled into the Grand Canyon on salt-gathering expeditions. He also understood that the etchings at Hopi clan rocks were part of those pilgrimages. Mallery states (p. 28):

> Mr. G. K. Gilbert discovered etchings at Oakley Spring, eastern Arizona, in 1878, relative to which he remarks that an Oraibi chief explained them to him and said that the "Mokis make excursions to a locality in the cañon of the Colorado Chiquito to get salt. On their return they stop at Oakley Spring and each Indian makes a picture on the rock. Each Indian draws his crest or totem, the symbols of his gens [(?)]. He draws it once, and once only, at each visit." Mr. Gilbert adds, further, that "there are probably some exceptions to this, but the etchings show its general truth. There are a great many repetitions of the same sign, and from two to ten will often appear in a row. In several instances I saw the end drawings of a row quite fresh while the others were not so. Much of the work seems to have been performed by pounding with a hard point, but a few pictures were scratched on. Many drawings are weather-worn beyond recognition, and others are so fresh that the dust left by the tool has not been washed away by rain. Oakley Spring is at the base of the Vermillion Cliff, and the etchings are on fallen blocks of sandstone, a homogenous, massive, soft sandstone. Tubi, the Oraibi chief above referred to, says his totem is the rain cloud but it will be made no more as he is the last survivor of his gens.

Gilbert's comment that the etchings were sometimes so fresh that the dust of carved sandstone still remained near a clan symbol documents that Hopis continued to use the Grand Canyon for spiritual reasons through the late 1870s.

Malotki, Ekkehart

1983 *Hopitutuwutsi/Hopi Tales: A Bilingual Collection of Hopi Indian Stories.* Sun Tracks, An American Indian Literary Series, vol. 9. Tucson: Sun Tracks and The University of Arizona Press.

This collection of Hopi stories, printed in both Hopi and English, deserves to be included in this annotated bibliography, not so much for its specific contribution to one's understanding of Hopi's relationship to the Grand Canyon, but rather to demonstrate the essence of a culture so intertwined with its environment. Through oral tradition, recorder/translator, Malotki and storyteller, Herschel Talashoma, provide a glimpse into Hopi culture. Goats, spiders, eagles, snakes, mountains, lakes, rivers and other elements of the environment show up in these stories, often represented as persons with facilities for language, thought, emotion, and revenge. Surrealism stands juxtaposed to realism. Nonhuman species are not glorified, nor simply begrudged, but instead recognized as individuals capable of both good and evil, like the human inhabitants who listen to these stories.

The sipapu is never mentioned in this work, but a related symbol appears in one of the stories. In the tale, "Tsorwukiqlo and his Eagles," a young boy flies on the back of his pet eagle into an upper world where "There was . . . an earth just as we know it here. But no living soul was anywhere in sight (p. 161)." To reach this upper world, the boy and his eagle flew to "a place where there was a small opening in the sky and they passed through it." This image resembles the Hopi story of Emergence, in which people climbed from the Underworld to this world through a small hole in the sky.

Malotki, Ekkehart

1983 *Hopi Time, A Linguistic Analysis of the Temporal Concepts in the Hopi Language.* Mouton Publishers, Berlin.

This book comprises a linguistic analysis of how Third Mesa Hopis conceptualize time. Malotki (p. 629) concludes that his monograph "... conclusively disproves Whorf's widely publicized contention that 'the Hopi language contains no reference to "time," either explicit or implicit.'" Malotki (p. 631) demonstrates that the Hopis have many temporal terms and concepts, including "... the spatio-temporal metaphor, units of time (day, month, season, etc.), the ceremonial calendar, temporal particles, and a range of miscellaneous time words."

Malotki (pp. 452-453) identifies the Wuwtsim ceremony conducted in November as one of the "primary ceremonial orientation points" the Hopis use to reckon time. Malotki states that November is "commonly considered the starting period of the yearly ceremonial round."

Of Wuwtsim, Malotki (p. 453) says,

> Its name Wuwtsim is commonly rendered 'Tribal Initiation,' but the term 'Manhood Initiation' might be more appropriate. The designation of the ceremony offers no real clue as to its meaning. It is apparently so ancient that its etymology is no longer transparent. Dorsey and Voth, too, had to concede failure in their attempt to secure plausible interpretation of the form *wuwtsmit*, the official label for the initiated members of the society in charge of Wuwtsim. On the basis of such evidence as *wuuwuyom* 'the old ones/elders' and *wuyóoti* 'he got old' they argue that there might exist a connection with the morpheme *wuu* 'old.'

Malotki (p. 453) notes the other societies involved in the Wuwtsim ceremony are the *taa-taw-kya-m* ... 'Singers,' *aa'-al-t* ... 'Horns,' and the *kwaa-kwan-t* ... 'Agaves."

Malotki points out, "From a temporal point of view it constituted an absolute time marker and served to accurately initiate the Hopi ceremonial year." A number of text samples are offered to illustrate this point.

Malotki, Ekkehart and Michael Lomatuway'ma
1984 *Hopi Coyote Tales, Istutuwutsi.* University of Nebraska Press, Lincoln.

This collection of *tutuwutsi* or folk tales contains an narrative titled "Iisaw Öngmokto" or "Coyote on a Salt Expedition." Malotki and Lomatuway'ma present both Hopi and English versions of this narrative (pp. 126-139).

In this tale, Coyote youngsters playing with children learned about the salt crystals that the children wore around their neck. These salt crystals tasted delicious and the Coyote asked where they came from, learning that they come from a salt deposit in the Grand Canyon. The young Coyotes went home and asked their father Coyote to go to the Grand Canyon to get them some salt since it made food taste so good. The father Coyote makes several attempts to go the Grand Canyon to get salt but is foiled each time by the brothers Pöqangwhoya and Palöngwawhoya who trick the Coyote. Twice when the Coyote went to sleep while enroute to the Grand Canyon, the brothers carried him back to his house and put him in his bed. On the third try the Coyote descends into the canyon but after he climbs out and goes to sleep the brothers fill his basket with rocks. The Coyote returns to the canyon and descends a second time to collect salt, only to have the brothers fill his basket with rocks again when he sleeps. The Coyote makes a third descent into the canyon to collect salt and returns all the way home without resting along the trail. This time the Pöqangwhoya and Palöngwawhoya brothers playing shinny near Songoopavi village see him and sneak into his house that night before the salt is unpacked. The brothers once again replace the salt with rocks. The next morning the Coyote goes hunting and returns to unpack the salt so his family can have a feast. When the Coyote finds the salt was switched with rocks he seethes with anger and dumps the rocks outside.

The story concludes by noting (p. 139) that "The brothers Pöqangwhoya and Palöngwawhoya were responsible for doing this to Coyote; therefore coyotes do not like salt. And here the story ends."

The account makes it clear that there is more than one set of Pöqangwhoya and Palöngwawhoya brothers. The account states (p. 137), "Responsible this time were the Pöqangwhoya and Palöngwawhoya brothers who lived in the canyon, not the brothers who carried him back home."

Malotki, Ekkehart and Michael Lomatuway'ma
1987 *Maasaw: Profile of a Hopi God.* University of Nebraska Press, Lincoln.

The authors begin this monograph with the statement (p. 1), "In the entire pantheon of Hopi mythological figures none is more important than the god Maasaw. His complexity and wealth of associations within the Hopi scheme of the world is immense" Maasaw is the god of death, the ruler of the underworld, the proprietor of the earth, owner of fire and crops, and maker of all animals and vegetation. As Malotki and Lomatuway'ma state (p. 2), "He is venerated as the giver and caretaker of life, the defender of Hopi ways, and as a powerful war deity."

Malotki and Lomatuway'ma assert that historically the Hopi conceptualization of Maasaw has changed from that a "low level" trickster and prankster to a near - monotheistic divinity who has gained apocalyptic stature by being revered as either a savior or destroyer of humankind on the day of purification (pp. 1-2).

The authors point out that (p. 17), "Maasaw's undisputed connection with death can also be seen in the fact that he is believed to have an abode in the vicinity of Sipaapuni, the former emergence hole through which now the spirit of the a dead person enters the afterworld."

Malotki and Lomatuway'ma quote Stephen to note according to the Walpi Snake Clan, Maasaw's footprints were first discovered going in a series of six concentric circles around the Mesa. They observe that the symbol of four concentric circles, termed *potaveni* or coiled plaque design, is found in many petroglyph sites throughout the Southwest. The Hopis interpret these concentric circles as symbols of their migrations (p. 28).

Mooho (narrow leaf yucca; *samowa* is broad leaf yucca) has an association with Maasaw since it is part of his traditional dress (p. 32).

At the time of emergence, Maasaw lent a helping hand at the Sipaapuni. Malotki and Lomatuway'ma quote Stephen (1936:137), who says (p. 38), "Maasaw stood astride of the orifice, and, as each Hopi made his appearance, Maasaw linked his arm in that of the Hopi, helping him to the surface and greeting him with welcome."

In a footnote (p. 38), Malotki and Lomatuway'ma speculate on the etymology of the term Sipaapuni, noting it may be related to the words for navel (*sipna*) and *siihu* (navel cord).

Malotki and Lomatuway'ma state (p. 67), "In the Hopi view of things Maasaw is the autochthonous proprietor of *tuuwaqatsi* "life and land" in its solid form, and *paatuwaqatsi* "water and life" in its liquid form."

They add (p. 68),

> As god of the surface of the earth, Maasaw is in particular the *genius loci* of the land claimed by the Hopi as their own. The geographical boundaries of this land, which is occasionally termed *mastukskwa*, or "Maasaw's country," are delineated in a legend collected by Stephen. In the tale, which begins with a quarrel among the gods motivated by the partition of the lands, Maasaw strides off a large tract for himself and his later protégés, the Hopi. "Maasaw first traveled south, then circuitously toward the east until he reached his starting point. He called this area his land. The exact limits are unknown but it is surmised he started from a point about where Fort Mohave is situated, thence south as far as the Isthus of Panama, skirted eastward along the Gulf of Mexico and northward by the line of the Rio Grande up into Colorado, thence westerly along the thirty-six parallel, or thereabouts, to the Rio Colorado, meandering along its tributaries, and so on, southward to his starting point at Fort Mohave. This was Masaaw's land originally, the land of the Hopituh (1929:55-6)."

In a footnote (p. 68), Malotki and Lomatuway'ma note that Swanton (1953:352) makes a reference to the concept of *mastutskwa* under the spellings of "Mastuc'kwe" and "Maastoetsjkwe."

As Malotki and Lomatuway'ma (p. 73) observe, Maasaw urged the Hopi to adopt his way of life, "which is distinguished by poverty and hardship." After quoting a Hopi narrative which foretells of the Hopis falling once again to evil ways, they add, "The Hopi can thus consider them themselves only as the temporary tenants on Maasaw's land ... The concept of temporary tenantship is expressed by the plural verb *haakyese* "to live/to stay for the time being."

One of the stone tablets possessed by the Bear Clan to demonstrate their ownership of the land is said to have two snakes along its edge which symbolize the two rivers that mark the boundaries of Hopi land (pp. 74-75). These two rivers are supposedly the Colorado River and the Rio Grande.

Malotki and Lomatuway'ma state (p. 76), "Prior to the Hopi embarking on their migrations Maasaw, in a farewell speech, emphasized that the land belongs to all people, not just to the Hopi. Furthermore, they were told never to part with it."

Maasaw's role as owner and guardian spirit of the earth is related to his serving as a protector of those who travel over his land. Hopis leaving on a journey leave offerings at one of Maasaw's shrines. Malotki and Lomatuway'ma (p. 84) quote Stephen (1936:151) who states, "Nearly every trail, now, has a cairn upon it at some point, and when a tired Hopi passes it he takes a bunch of grass and rubs his head, arms, legs, etc., and places the tuft and a small portion of his burden on the heap, placing a stone on the tuft, or a bit of wood, to hold it secure. At the same time he asks Maasaw to protect him; if returning from a journey he thanks Maasaw for his protection."

Malotki and Lomatuway'ma (p. 85) refer to Titiev's (1944:62) description of a *qalalni'owa* or "boundary stone" that has Maasaw's head marked on it.

Malotki and Lomatuway'ma (p. 124) describe a "custom that was once practiced in conjunction with entering Maasaw's cave shrine, an important station along the ancient Hopi salt trail to the Grand Canyon." This entailed a prophecy based on the condition of the food remains found in the cave. Malotki and Lomatuway'ma provide a Hopi text that discusses this custom. In translation, this text reads (pp. 125-136),

> In the days past, the Hopi men used to go on salt journeys to Öntupqa, that is, the Grand Canyon. In their narratives they relate, that after they started out from Orayvi and reached the canyon rim, they usually spent the night at the top and did not start their descent until the next morning. On their way down they came to a cavern known by the name of Nukpana ("The Evil One"). Upon reaching this site, those men who were making this expedition for the first time, were informed that on entering the cave they would find food strewn about.
>
> And, indeed, this was true. At one place in the cave they came across a metate with some cornmeal on it. If upon inspection the flour turned out to be freshly ground, this was an unfavorable sign. But if by chance the cornmeal was old, then this was supposed to be a good omen. It foretold how our crops and our food would be provided for us in the near future. Those who have undertaken this journey agree that new things found in the cavern portend adverse food and crop conditions. Consequently they used to say that the man who discovered something good there should not be desirous of it. On the other hand, the salt expedition members were elated whenever they came across some old corn cobs. These, according to tradition, indicated that all of the various crops would be produced in abundance.

On p. 126, Malotki and Lomatuway'ma include a photograph of "Nukpana, the home of Maasaw, at the bottom of Salt Trail Canyon." Malotki describes the cave as he found it on May 19, 1986, to be twenty feet wide at the entrance. Malotki asserts that the cave, "... allegedly, has not been visited by any Hopi for over two generations."

On p. 127, Malotki includes a photograph of the remains of a prayer stick which provides "positive identification of Maasaw's home." He notes this was found by archaeologist Peter Pilles, who accompanied Malotki into the cave.

Malotki and Lomatuway'ma (p. 211-212) note that the *kwaakwant* (Kwan, Agave, or One Horn Society) "... enjoy some most intimate relationships with Maasaw, the god of death." Like Maasaw, the Kwan men are also charged with escorting the dead souls on their journey to Maski, the Home of the Dead. The *kwaakwant* derive their name from *kwaani*, i.e., agave. The head of the *kwaakwant* is traditionally a member of the Maasaw Clan.

As Malotki and Lomatuway'ma (p. 217) note, "Kwan men play a crucial role during a *wuwtsimnatnga* or 'Wuwtsim initiation.' Reserved only for Hopi males, this most sacred of all Hopi rituals is referred to, by way of English circumlocution, as 'Tribal Initiation' or 'Manhood Initiation.'"

Marcy, Colonel R. B.

1866 *Thirty Years of Army Life on the Border.* Harper and Brothers, New York.

In his book about life in the frontier West, Marcy includes a long description of the Hopi Mesas (pp. 104-111). His information, however, does not come from his own observation of the Hopi. Rather, it is quoted in its entirety from P. S. G. Ten Broeck's report on the Hopi (published in Henry Schoolcraft's (1854), *Information Respecting the History, Condition and Prospects of the Indian Tribes of the United States*).

Marston, Otis

1951 Letter from Otis Marston to Louis Schellbach, Park Naturalist, Grand Canyon, dated April 25, 1951. Ms. in "Hopi Salt Trail Paraphernalia" file at Museum of Northern Arizona Library.

Marston states "It is my belief that the salt we found last year is the location used by the Hopis at the junction of the Little Colorado and Colorado Rivers." Analysis of the mineral he collected indicated it was sodium chloride and sodium sulfate. He says, "This combination of salts would produce results on the human body that would meet the description given as "salt medicine."

However, since the site visited by Marston was upstream of the Little Colorado River and downstream of Kwagunt Rapid, this location is not the Hopi Salt Mine. Marston may have collected salt from the salt deposits shown between River Miles 60 and 61 in *The Colorado River in Grand Canyon, A Guide* by Larry Stevens (1983).

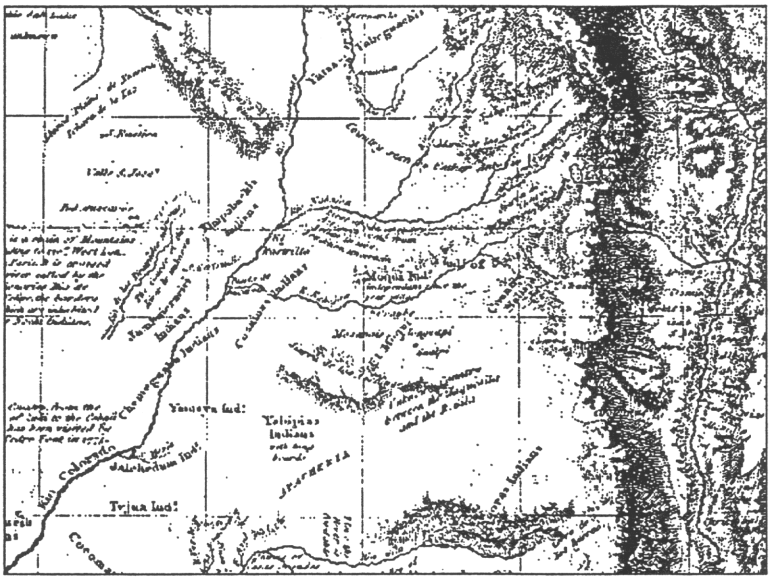
This letter is only signed "O" but a response from Shellbach to Martston establishes who wrote the letter.

Martin, Robert Sidney and James C. Martin

1982 *Contours of Discovery, Printed Maps Delineating the Texas and Southwestern Chapters in the Cartographic History of North America, 1513-1930.* The Texas State Historical Society in cooperation with the Center for Studies in Texas History, University of Texas at Austin.

Humboldt's 1810 map entitled "A Map of New Spain from 16º to 38º North Latitude" is discussed and illustrated (pp. 42-44). Humboldt was a renown scientist and natural philosopher who had a seminal impact on the development of geography as an academic discipline. Humboldt perfected his map of New Spain in 1809 after touring Spanish colonies and conducting archival research in North and South America from 1799 to 1804. The map was originally published in 1811 in Humboldt's four volume *Political Essays on the Kingdom of New Spain.* While Humboldt's map is a "magnificent cartographic achievement" given its historical context, it contains a number of inaccuracies and distortions with respect to the depiction of rivers and other geographical features. Nonetheless, Martin and Martin describe Humboldt's map as the "... best depiction based largely on Spanish sources at the end of the Spanish Period ..."

The Puerto de Bucarelli/R. Nabajoa, depicted as flowing into the Rio Colorado, appears to be the Little Colorado River. The Puerto de Bucarelli appears to be the Little Colorado River Gorge, while the R. Nabajoa appears to be the middle and upper stretches of the Little Colorado River. A second river labeled "Rio Nabajoa" to the north appears to be the San Juan River. The settlements of Oraybe, Mosanais, Jongopavi, and Gualpi, however, are located to the south of the Puerto de Bucarelli/R. Navajoa. The area of the Hopi Mesas bears the legend "El Moqui. An additional legend in this area states, "Moqui Ind. independent since the year 1680." The Cosninas Indians are depicted to the west of El Moqui near the confluence of the Puerto de Bucarelli and the Rio Colorado. The "Ind. of Nabajoa" and "Country of Nabajoa" are located to the east of El Moqui along a mountain range which appears to be the Lukachukais. Zuni is located to the southeast of El Moqui at the base of mountains that appear to be the Zuni Mountains.



Masayesva, Vernon
1993 Western Conference Testimony. *Hopi Tutu-veh-ni* 11(91):3,4.

This is a transcript of a speech delivered by Vernon Masayesva, Chairman of the Hopi Tribe, at the Western Governor's Conference held in Tucson, Arizona, on June 16. Masayesva makes a number of comments about the Hopi world view pertaining to land and water.

p. 3, "Throughout the West, land and water have been the two things people value most highly. Water sustains the land that provides for people, animals, livestock and plants."

p. 3, "The Hopi people are beginning to understand that the first step to achieving governance is to exercise some measure of control over the regional and even global forces that exert pressure on us from the outside. We can't achieve our goals through isolation. We need to be active players in the regional development and management policy decisions to preserve and maintain our respective local environments and to take advantage of development opportunities."

p. 4., "For some, 50-90 years [is a] lifetime. But for a culture, which has, and continues to thrive on the Colorado Plateau for over a thousand years, 50 years is only a moment of time ... "

p. 4, "To Hopis, water is life. Our very survival ... materially, physically, and spiritually, is linked to water and land sustained by water."

p. 4, "The Colorado River water which runs through our ancestral land is denied to us, at the present, by complicated water laws that govern water compacts of Western States ... We are currently involved in a lengthy and costly adjudication to secure water from the Little Colorado River, a small tributary to the Colorado River which is overused, its capacity to meet the long-term water requirements of the Navajos, Hopis, and Paiutes is doubtful."

p. 4, "In recent years, our Hopi elders have seen the washers and springs of their youth reduced to baked earth and shallow ponds of stagnant water."

p. 4, "I wish to end my speech with a Hopi prayer:"

LET THERE BE LIFE ...
LET IT BE A GOOD LIFE ...
LET IT BE FOREVER.

Masayesva, Vernon

1993 Stewardship and Survival in an Age of Limits. A talk by Vernon Masayesva, Chairman of the Hopi Tribe for the Third Inter-American Indigenous Congress on the Environment and Economic Development. *Hopi Tutu-veh-ni* 11(97):3,5.

This speech addresses issues concerning the finite resources of the planet and the need for sustainable development. Masayesva makes several statements pertinent to the Grand Canyon and the Glen Canyon Environmental Studies.

He states,

> At the time of the Hopi ancestral emergence millennia ago near the confluence of the Colorado and Little Colorado Rivers, in the region of the Grand Canyon, we entered into a covenant with the Keeper of this World to be stewards of the land and caretakers of earth. We must keep the earth alive in order to ensure our own existence. Hopi is more than a culture or a collection of villages -- it is a philosophy, a life-way. We offer solutions to survival in an age of limits, and we extend this knowledge to others who are willing to serve as Earth stewards.

He offers his opinion that,

> Responsible management models for the Grand Canyon region ... may provide an answer for the rest of the world. Our region, the original Hopi tutsqua, reflects what is happening elsewhere in miniature. The ancestral Hopi were the first people to walk on the Colorado plateau. After our ancestors came the ancestral Paiute, Hualapais, and Havasupais. Then came invading Athabascans, Spanish, and Americans. The most severe impacts came first from introduction of livestock to the tribes by the Europeans, then resulting erosion.
>
> But the most severe impacts occurred in this century -- from the mid-1930s to the present. The Colorado was dammed; extensive coals and uranium mining developed and more and more aliens moved into the House Made of Dawn.
>
> Over three million tourists come to the Grand Canyon and Indian Country every year, and that number is projected to double by the year 2000. Their water needs, the pollution from their cars and their physical impacts create serious problems. Indians and non-Indians alike are dependent on the cash economy -- like it or not. But a balance must be developed between responsible management and economic development.

After discussing ecological problems with slurry transport of coal from Black Mesa, Masayesva concludes that,

Hopi prophecy maintains that someday the land around our central mesas will be filled with people. It seems that day has come. But we need not despair that the old days are gone. Nothing ever remains the same. Life and nature is not static. Using the symbols of the digging stick as a sign of technology, the gourd full of water as a sign for protection of the essential resource and remembering our obligations as stewards and caretakers, we can proceed into the 21st century. It will take responsibility, diplomacy and cross-cultural skills, but at least today we are sitting down together and talking about collective futures. This is a major improvement over the last five centuries.

We face difficult challenges. But these need not be insurmountable. Let us reach out together and help prepare the future for the coming generations. In the words of an old Hopi prayer, "Let there be life. Let it be a good life. Let it last forever."

Masayesva, Vernon

1994 The Problem of American Indian Religious Freedom: A Hopi Perspective. *American Indian Religions* 1:93-96.

In this journal article, Masayesva points out that the American Indian Religious Freedom Act (AIRFA) is a law that only requires procedural steps and affords no actual protection. AIRFA only commands *process*, not *results*.

Masayesva opines that in considering First Amendment rights to religious freedom, Federal agencies and courts apply a test that requires Indians to demonstrate (1) that a religious practice is central to their religion, (2) a religious belief or practice is indispensable to their religion, and (3) the religious practice or belief cannot be done elsewhere.

Masayesva thinks this three-part test is culturally biased. He observes (p. 94) that unlike Christian and Jewish religions in which places on earth are largely symbolic of a universal being, "For Indians ... places and things here on earth often are more than symbols. God may actually be present in places or things here on earth."

He suggests that the three-part test needs to be put aside and that the First Amendment should be applied in a more equitable manner. Masayesva concludes by stating (p. 96), "The time has come when protection of Indian religious rights must also become a reality under the First Amendment."

Mason, Otis M.

1910 Travel. In *Handbook of the American Indians North of Mexico,* Part 2, edited by Frederick Webb Hodge, p. 802. Smithsonian Institution, Bureau of American Ethnology, Bulletin 30. Government Printing Office, Washington.

Mason observes that Indians traveled with "phenomenal speed and endurance." He provides as one example the fact that "A Hopi messenger has been known to run 120 m. in 15 hours."

Matthews, Washington

1902 Myths of Gestation and Parturition. *American Anthropologist* 4:737-742.

Matthews (p. 737) discusses a large class of myths in which the human race "is represented as having originated within the earth and as having emerged to its surface through a hole in the ground. The ascent from the lower world is represented as accomplished by means of a tree, vine, or reed, and a deluge is often associated with the emergence."

Matthews considers these accounts to be a "myth of gestation and birth." He says (p. 738),

> Among all our Indian tribes, so far as studied, the earth is at least personified as a woman and a mother, and perhaps the ideas of some Indians, in this respect, are more than mere personification. The idea of the maternity of the earth may have been derived from its fruitfulness and the idea of the masculinity of the sun or the sky, from the obvious effect of sunlight or rain upon that fruitfulness; but with some Indian tribes the conception seems to be more precise and material than this ...

Matthews does not explicitly discuss the Hopi origin account but he does briefly describe the closely related creation myth of the Zunis as an example of a myth of gestation and parturition.

Mearns, Edgar A.
1896 Ornithological Vocabulary of the Moki Indians. *American Anthropologist* 9(12):391-403.

This article includes a brief, general introduction to the Hopi people and their environment and then presents a long list of Hopi words relating to birds. A Hopi man named Ongwischey (Raven) assisted Mearns with the linguistic research. Mearns notes that the Hopis are not ornithologists and can not be expected to have names for every bird or always discriminate between closely related species. Some names Mearns obtained for birds were descriptive and coined on the spot (i.e., *chê'-ê,* "little bird"). Ornithological terms were rendered phonetically, and variant spellings resulted from dependent upon the pronunciation of different individuals (p. 393).

Ongwischey's brother, Näh'hûh (Duck) was a renown hunter, having killed mountain sheep, deer, antelope, and even an elk in the White Mountains of Arizona (pp. 392-393).

Mearns briefly discusses the importance of eagles in Hopi culture, noting their feathers are carefully curated in feather boxes, and that two species of eagles are kept caged in the Hopi villages (pp. 394-395).

A number of birds identified in the Grand Canyon during the 1993 Hopi river trip are included in Mearn's list, including:

*Palaqwayo (*Red Tail Hawk)
p. 398, "Buteo borealis calurus (Cass.), western red-tail, *päh-lä'-qui-hua.* They understand the various ageal and irregular phases of plumage and apply the same term — *päh-lä* (red) — to all specimens of this species."

Kwaahu, Golden Eagle.
p. 398, "Aquila chrysactos (Linn.), golden eagle, *tîll-whôôsh'hêap-qua-hûr.*"

Qötsakwahu, Bald Eagle. aka *Nuvakwahu* (i.e., "Snow eagle").
p. 398, "Haliæetus leuocephalus (Linn.), bald eagle, *nê-huach'-qua-hûr.*"

Mongwu, owl.
p. 398, "Bubo virginianus occidentalis Stone, western horned owl, *môông'hua or môông'wâ.*"

Kingfisher
p. 398, "Ceryle alcyon (Linn.), belted kingfisher, *çhê-kum'n'äh,* a name applied in common to several water loving birds."

Pinyon jay / Stellars jay / Scrub jay.
p. 400, "Aphelocoma sieberii arizonæ Ridgw., Arizona jay, *äh-äh'.*"
p. 400, "Cyanecephalus cyanocephalus (Wied), piñon jay, *äh-äh'.*"

Angwusi, Raven,
p. 400, "Corvus corax sinuatus (Wagl.), American raven, *ông-wîsçh'êy.*"

Mercer, Jean Ann

1992 Native American Perspectives on the Grand Canyon: The Ethnohistorical Component of the GCES. *Colorado River Studies Office Newsletter* 5:1-2.

This article in a newsletter published by the Bureau of Reclamation reports on the involvement of six tribes in the Glen Canyon Environmental Studies, including the Havasupai, Hopi, Hualapai, Navajo, Southern Paiute, and Zuni Tribes. Mercer observes that the Glen Canyon Dam Environmental Impact Statement is paying remarkable attention to Native American traditional cultural properties.

Mercer (p. 1) notes "To some Pueblo groups, the Grand Canyon is the place of ancestral emergence into this world. The Hopi people have long had an association with the Grand Canyon as the place where pilgrimages are made on a sacred trail to collect objects for ceremonial use."

McGuire, Joseph D.

1910 Trails and Trade Routes. In *Handbook of the American Indians North of Mexico,* Part 2, edited by Frederick Webb Hodge, pp. 799-801. Smithsonian Institution, Bureau of American Ethnology, Bulletin 30. Government Printing Office, Washington.

In this synopsis on Indian trails, McGuire (p. 800) notes, "In the S. W. there were long trails by which the Hopi and other Pueblo Indians traveled to and from the sources of supply of salt from the Colorado r. and elsewhere."

McNitt, Frank

1962 *The Indian Traders.* University of Oklahoma Press, Norman, OK.

In a discussion about Willow Springs as a popular trading and resting point for Mormons and other American traders, McNitt includes a footnote about the Hopi clan rocks nearby. He writes (p. 267):

> Van Valkenburgh notes that . . . "One mile south of Willow Springs on the rough and rocky road that runs to Moenave and Tuba City, are located one of the finest and largest series of inscriptions in the Southwest. These petroglyphs completely cover a number of large, smooth boulders for some 75 feet. It is said that these date from the 12th century until modern times and are still used as clan symbols for Hopis traveling to the Hopi Salt Mine in the gorge of the Little Colorado River. This is, according to Navajos who have descended the dangerous and long trail, not a mine, but a large cave in which salt crystals hang from the ceiling like stalactites."

In the Bibliography, McNitt identifies the source of this quote--Richard Van Valkenburgh, *Diné Bikéyah.* Paper, mimeographed in limited number of copies. Window Rock, Office of Indian Affairs, 1941.

McNitt, Frank (editor)

1964 *Navaho Expedition: A Journal of a Military Reconnaissance from Santa Fe, New Mexico to the Navaho Country Made in 1849,* by Lieutenant James H. Simpson. University of Oklahoma Press, Norman.

In 1849, Lieutenant Simpson traveled to Navajo country under Lieutenant Colonel John Macrae Washington to negotiate a treaty with the Navajos, and this is an edition of his travel journal.

Simpson reported that one Hopi was present when the treaty between the Navajos and the U.S. agent was signed at Canyon de Chelly (pp. 98-101). Immediately after this event on September 9, 1839, the Americans returned to Santa Fe, having no further contact with Hopis.

In the conclusion to his report, Simpson made a point of calling to the attention of his superiors in the War Department, the necessity of exploring the region to the west further. He advised them of "the expediency of having the country examined west of the Pueblo of Zuñi, for the ascertainment of a wagon route from the former point to the Pueblo de los Angeles, or, failing in this, to San Diego" (p. 160). Simpson suggested that a road running "as direct as possible. . . passing by the pueblos of Laguna and Zuñi, and possibly of the Moquis," would save as much as three hundred miles on the other routes to California which ran to the north and south of this latitude (p. 162).

Old trappers of the region had counseled Simpson on possible routes for such a road, including Richard Campbell who told Simpson of one route which ran directly from Zuni to Hopi, and on to the Colorado River. Campbell informed Simpson that "a route leads from Zuñi by way of the pueblos of the Moquis," to the Crossing of the Fathers on the Colorado River (p. 161).

The other route which Campbell mentioned and suggested as a possible road through the Southwest ran along the Rio de Zuni to the Little Colorado River and then either west onto the Colorado Plateau or across the Grand Canyon to the north rim, and onward to California (p. 161).

Monongye, David

n.d. Holding Fast to the Path of Peace (A Traditional View). Privately published by John Kimmey, Arroyo Hondo, New Mexico.

This account of Hopi prophecy, rendered in the "traditionalist" rhetorical style, was published sometime after 1973. The account is paraphrased by John Kimmey but "validated" by Monongye for publication. The tract is unpaginated.

Monongye provides an abridged account of the Hopi origin into this world, and interprets the "prophecy rock" found near Oraibi. Integral to Monongye's account is the idea that Hopi people return to a lower world after death.

Moorhead, Max L. (editor)

1954 *Commerce of the Prairies by Josiah Gregg.* University of Oklahoma Press, Norman.

In 1844, Josiah Gregg published a book about life on the western plains. Moorhead republished it in 1954 with editorial additions.

Gregg mentioned the Hopis in his work, discussing their cotton production and relative independence from white society. Also, he claimed that from their banged hair style it was clear that they were related to other peoples of the Colorado Valley who wore their hair similarly (p. 228).

Otherwise, Gregg offers little information about the Hopi because he had not visited them personally, gleaning what knowledge he had from the observations of others.

Morehouse, Barbara Jo

1993 Power Relationships in the Spatial Partitioning and Natural Resource Management of the Grand Canyon. Ph.D. Dissertation, Department of Geography and Regional Development, University of Arizona.

Drawing upon the work of Foucault, Morehouse applies a post-modern model to describe how bounded space relate to power relationships structuring the management of the Grand Canyon. She examines boundary in terms of how they function as shells, facilitators, tollgates, panopticon, fulcrums, nets, and filters (pp. 24-36). In addition to considering power relations between ranchers, miners, loggers, and bureaucrats, Morehouse reviews the historical relationship between the Federal government and Indian Tribes regarding traditional Native American use of the Grand Canyon.

Her analysis begins with how the entry of the Athabaskans into the Southwest affected the use of the Grand Canyon region by indigenous tribes (i.e., the Hualapai, Havasupai, and Hopi) and continues to consider the effects of the way that the Spanish and American governments partitioned space. Morehouse cites Leigh Jenkins (p. 76) to the effect that, "As more people moved into the area, the Indians found themselves not only encircled by new culture, but also encircled by geographical lines that were used to dictate where they could live, and what they could do."

Morehouse reviews the history of the Grand Canyon National Park, describing how it came into being as a National Monument in 1908 and the subsequent changes that have occurred its spatial configuration (pp. 80-269). She observes that until recently the Hopi Tribe remained "invisible and voiceless in the proceedings and negotiations over the size, configuration, and function" of the Grand Canyon National Park (p. 193). The Hualapai, Havasupai, and Navajo Nations were more directly involved, largely due to disputes about political boundaries.

The passage of P.L. 93-620 in 1975 enabled the Grand Canyon National Park to enlarge its boundaries and to enter into cooperative agreements with Indian Tribes and other governmental entities to protect and interpret the canyon in its entirety (pp. 267-277). Morehouse observes that unlike other tribes, the Hopis and Paiutes did not participate in negotiations over enlargement of the park, but "... they had at least gained recognition with the Grand Canyon National Park Master Plan" (p. 274).

Morehouse reviews the history of attempts to incorporate the Little Colorado River Gorge into the Grand Canyon National Park (pp. 284-291). The contested area extends from the confluence of the Little Colorado and Colorado Rivers upstream 13 miles to Blue Springs. This area is valued because it is a spawning ground for the endangered humpback chub and it contains the primary source of permanent water flowing in the lower Little Colorado River. A number of ways to incorporate this area into the park were considered by the National Park Service employees, including the idea of a conservation easement purchase of the land from the Navajo Tribe. Morehouse suggests

that due to a perennial lack of funds, as well as tribal resistance, nothing has been accomplished to attain this management goal.

Although recent Grand Canyon National Park Superintendents have had a "proactive" approach to interaction with Indian Tribes, meeting regularly with the tribes for consultation (pp. 316-317), communication between Native Americans and the National Park Service remains problematical in part due to different modes and structuring of knowledge. Morehouse explains (pp. 321-322),

> To understand Hopi relationships with other land management entities in the area ... it is necessary to understand their perceptions of geographical space. The Hopi have no word in their language for boundary in the English sense. Rather, they have a word, qalnani, which, though it technically is equivalent to the English work boundary, is more subtle in its interpretation. The concept entails joint stewardship (i.e., acceptance of responsibility) for protecting a valued place, with neither entity abrogating the affinity of the other to that place (Jenkins, April 9, 1992). In this sense, the Hopi concept accords more closely to a type of relative space, in which space is defined based on the particular criteria, rather than to any concept of absolute space, which entails the bounding of an area to maintain individual power over all aspects of that area.
>
> The concept of qalnani arises, for example, with regard to the very important Hopi religious sites within the park. Thanks to the cordial relations between the park and the tribe, these sites are being managed in the spirit of "joint stewardship," with no objections being voiced by either party. The arrangement will undoubtedly continue to operate in an amicable fashion as long as the park continues to help protect tribal shrines, while also continuing to allow tribal members free access to the part for religious and other traditional purposes, and as long as tribal members do not abuse these privileges. Most recently, the tribe and the park have been involved in working out a cooperative agreement whereby cooperation on planning and cultural interpretation of the park will be formalized ... The tribe, however, would like to achieve full partnership with the park, wherein they could be involved in the administration, implementation and enforcement of policy, especially with regard to the area around the Hopi salt mine, and would like written policies to developed detailing tribal rights. The tribe would also like to expand its relationship to the Park Service regional office and to the head office in Washington, D.C.

Morris, Earl H.

1928 An Aboriginal Salt Mine at Camp Verde, Arizona. *Anthropological Papers of the American Museum of Natural History* 30 (3):77-97.

This monograph describes Native American use of a salt mine located about one and half miles west of Camp Verde, Arizona. Evidence of this use was documented during commercial mining of the salt by non-Indians in 1926.

The salt occurs two strata (p. 81). One is a loose stratum ten feet thick composed of crystals of Glaubers salt and loose clay. Under this is the "mother rock" of the deposit composed of sodium sulphate ($Na_2So_410H_20$), much of it in the form of Natronite. Gypsum (Ca_2 So_42H $_2O$) and common salt (NaCl) occur as impurities in the sodium sulphate. The salt occurs in crystals of Halite, some weighing as much as twenty pounds.

Morris describes the aboriginal techniques of salt mining by stating (p. 81),

> The aborigines mined their salt by tunneling. They chose a stratum where the salt was relatively plentiful and followed it inward, beating to pieces the breast ahead of them, casting the predominance of waste behind, and garnering the precious bits of salt. There is no evidence that they worked with any degree of system, but instead, burrowed about as chance, or a particularly fine lump of salt, directed them. Certainly they did no timbering, nor did they leave pillars to support the always dangerous roof.

Pick hafts, cedarbark torches, yucca leaves, yucca sandals, matting, rolls of twigs, wooden club, stone picks in the process of manufacture, unhafted stone hand picks, grooved hafted stone picks, and ashes from fires were found in the aboriginal mine (pp. 82-83). In addition, the mummified remains of one person killed by a cave-in were also documented. The Native Americans tunneled into the hill at four or more levels. Morris infers that the mine was in use for a long time since there were thousands of cubic yards of rock worked by Native Americans using only blunt stone tools (p. 83).

No potsherds were found inside the salt mine. Morris estimates the date of the site by examination of the archaeological sites in the general vicinity. Based on this admittedly limited evidence, Morris (p. 97) thinks the salt mine was "worked when the Pueblo culture had reached its full development; when the Gila, the Mimbres, and the Little Colorado variants had attained their diagnostic features; thus rather late than early in the cycle of aboriginal occupation of the Southwest."

Murdock, George Peter

1934 *Our Primitive Contemporaries.* Macmillan Company, New York.

Chapter 12 of this book (pp. 324-358) provides an ethnographic overview of the Hopi. The bibliography indicates that Murdock relied heavily on the publications of Fewkes and Voth in preparing this overview.

Murdock (p. 343) describes how abstinence from salt is part of the ritual that accompanies a girl's puberty rites.

With respect to death, Murdock observes (p. 345), "The Hopi regard death with fear and abhorrence, and refer to it only by circumlocution." Murdock describes the Hopi belief that all things, including the inanimate, have "breath bodies" or souls. Murdock describes the rituals that accompany burials (p. 345-346).

Murdock states (p. 346),

> The "breath body" of an adult ... lingers with the corpse for four days and then journeys to the "Skeleton House" in the underworld. Here the dead live much as do the living, except that the seasons of the year are reversed; they plant and reap, adhere to their clan organization, and conduct their religious ceremonies. The ghosts of the dead become metamorphosed into *kachinas*, or ancestral spirits of their respective clans, who form the basis of the Hopi hierarchy.

Murphy, Matthew M.
1911 Map showing "Territory Claimed by the Older Moquis." National Archives, CCF 45096-10-313.

This document was prepared by the Special Allotting Agent assigned to allot the Hopi Indian Reservation. This document includes a map showing the territory claimed by older Hopis. The map includes a plethora of arrows depicting the direction of Hopi clan migrations.

In a note accompanying the map, Murphy writes,

> The arrows ... show the routes followed by the clans that inhabit the Moqui Villages at the present time. Each clan claimed all the land on both sides of the route. As the routes converge the claims overlapped each other; some of the First Mesa people came from Taos, N. Mx; some form Clear Creek canon below Winslow; some from Grand Canon; some from ruins to the north; some from Chinle. The other villages are peopled in much the same way. Each clan claims to have been first on the scene and so claims prior rights to the country.
>
> Territory claimed by the older Moquis: mouth of the Little Colorado to Holbrook; Holbrook to Chinle; Chinle to San Juan River; San Juan River to Colorado River; Colorado R to mouth of Little Colorado.
>
> The young Moquis claim the present Moqui reservation was given them in lieu of the territory described above.

Interestingly, the map includes an arrow pointing from the Grand Canyon towards Zuni with the caption "Zuni from Cataract Canon ruins to present location."

Murphy, Matthew M.

1928 *The Snake Dance People and Their Country: Hopi Ceremonies.* Lincoln Press, Oakland, California.

Murphy identifies himself as the "Late U. S. Allotting Agent for the Hopi Reservation."

Murphy's recounting of Hopi migrations describes travels through North and South America from the Arctic to the Antarctic. The people traveling from the north met the people traveling from the south in Mexico before settling the Hopi Mesas (pp. 1-4).

Murphy describes Hopi use of the Grand Canyon, stating (pp. 12-13),

> There is a holy place in the canon of The Little Colorado River, a few miles above its junction with The Colorado, where for ages, the Hopi priests have retired for meditation and to communicate with the Gods and get visions of future events.
>
> A hidden trail, guarded by the spirit of a priest whose grave is a short distance to one side, leads down through a crevice in the canon wall.
>
> Lower down, by the side of the trail, a huge cistern is, eroded from the solid rock. This cistern or holy well as the Hopis call it, has no visible inlet or outlet, yet it is always full of pale green water. This water has great curative properties, especially in the treatment of skin diseases.
>
> The well was created by the gods, and its virtues revealed by them to the priests. Farther down, is a salt spring whose waters are used in Hopi ceremonies. At the foot of the trail is the mine from which the priest obtain the pigments used to decorate their bodies.
>
> Among the other curiosities to be seen, is a fountain that was once a geyser, and an orifice far up on the canon wall from which, at times, spouts a stream of green water.
>
> The priests have a shrine here where offerings are made to the spirits that preside over this sacred retreat. The Hopis say that none of these things are visible to profane eyes, unless revealed by a priest. They have been seen by at least two white men who were attended by a priest. Four hours are required for the descent; the return trip twice as long.

Museum of Northern Arizona

1968 Site Cards for NA 10531 (A-F), 10533, 10534, 10535, 10536, 10537. Ms. on file at Museum of Northern Arizona Site File.

These archaeological site cards were prepared by Peter Pilles in 1968. The Hopi Salt Trail from Oraibi to the Grand Canyon is divided into nine segments for convenience in record keeping. A map included with the site cards illustrates the route and site number designations for this trail in relation to USGS 1:62500 map outlines. The site cards attribute the Salt Trail the "Hopi and pre-Hopi" culture, with a temporal designation from "? to PV (modern times)."

NA 10531 (A through F) comprises the first six segments of the trail extending approximately 74 miles from Oraibi to the Salt Trail Canyon.

NA 10532 comprises the section of the Salt Trail from the head of Salt Trail Canyon to the Little Colorado River. The distance is estimated at about 13 to 15 miles. Resources are listed as salt, and yellow and red ochre. The site file includes a map prepared by Vernon Taylor in March of 1960 depicting and describing a route down Salt Trail Canyon.

NA 10533 comprises the section of the Salt Trail from the confluence of Salt Trail Canyon and the Little Colorado River to the confluence of the Little Colorado and Colorado Rivers. The distance is estimated to be about seven miles.

NA 10534 comprises the portion of the Salt Trail from the confluence of the Little Colorado and Colorado Rivers to the Salt deposits. The distance is estimated at "2+" miles.

In addition to these trail segments, three other places associated with Salt Trail are given site numbers.

NA 10535 is a cave of yellow and brown ochre. Pilles notes, "Cave is partly weathered out and probably partly dug out. Pahos deposited in back of cave. Possibly cave of Masau'u." An addendum by E. Malotki on October 15, 1988 reads, "This location is the kooyemsi shrine, not the Maasaw cave."

NA 10536 is the Sipapu, described as the "legendary place of origin. Mineral spring." The opening in Sipapu is estimated as having a diameter of 10 feet. A hematite source is listed.

NA 10537 is described as the "Salt deposit. Encrustations on side of cliff." A terrain reference point is listed as a "Mushroom-like rock at ledge."

National Park Service

n.d. Art and Architecture of the Painted Desert Inn. Petrified Forest National Park, National Park Service, U. S. Department of the Interior.

This brochure describes the art and architecture of the Painted Desert Inn, including the murals in the "Kabotie Room." These murals, painted by Fred Kabotie, include a depiction of a journey to Zuni Salt Lake by two men from Shungopavi. The brochure states, "Salt used in Hopi ceremonies must originate either from this lake or from a source near the confluence of the Colorado and Little Colorado Rivers. The description of the mural describes the war entrance into Zuni Salt Lake which is depicted in the mural.

Nelson, John Louw

1937 *Rhythm for Rain.* Houghton Mifflin, Cambridge.

Chapter 5 in this novel, entitled "Eagles that Climb to the Sun," describes the collection and use of eagles (pp. 48-58). Although this is a fictional account, the description of collecting eaglets from their nests is based on Hopi ethnography.

Nequatewa, Edmund

1943 Some Hopi Recipes for the Preparation of Wild Plant Foods. *Plateau* 16(1):18-20.

Nequatewa, with the help of his wife Jean, presents sixteen short recipes for preparing wild plant foods. Nequatewa classifies the wild plants in terms of the categories used by Bartlett in her article "Edible Wild Plants of Northern Arizona (1943, *Plateau* 16(1):11-17).

Five recipes pertain to plants found in the Grand Canyon that were identified by the Hopi Research Team during the 1993 GCES river trip. These plants include: *Le-po-si* (Juniper berries, *Juniperus utahensis*); *Yo-ngo* (Prickley Pear, *Opuntia hystricina* and *polycantha*); *Po-na* (Cholla catcus, *Opuntia whipplei*); *Le-hu* (Indian Millet, *Oryzopsis hymenoides*); and *Su-vif-si* (Squawbush, *Rhus trilobata*).

Nequatewa, Edmund

1955 The Destruction of Elden Pueblo, A Hopi Story. *Plateau* 28(2):37-44.

Nequatewa recounts a Hopi folktale about the destruction of Ho-vi-itci-tu-qua, which he identifies as Elden Pueblo. In this story, a beautiful young woman living at the pueblo of Topachovi at Chaves Pass will only marry a man who brings her a live red fox for a pet. Many men try but all fail. Finally a young man named Pi-tci-si-vos-tiyo (Cotton Seed Boy) captures a red fox by following the instructions of his grandmother, an old "Spider Woman." Since the young man is a commoner everyone in the village is surprised when the young woman marries him. Before long, however, a young man from Elden Pueblo begins to visit the young woman and they commit adultery. The fox observes this and tells the young woman's husband. Pi-tci-si-vos-tiyo and his Spider Woman grandmother decide to seek revenge by declaring war on the people of Elden Pueblo. Pi-tci-si-vos-tiyo obtains allies from the Kisipaiyam (Yavapais) and together they attack Elden Pueblo. The young husband kills his rival, and the Yavapais kill all of the other inhabitants except for the young women and girls who were taken captive.

"This is how Elden Pueblo was destroyed, not by Pi-tci-si-vos-tiyo himself, but by his invited war parry of Yavapais from the Verde Valley" (p. 44). Pi-tci-si-vos-tiyo and his grandmother realize they had done wrong by taking revenge on the whole village and not simply his rival. They leave and went south. Nequatewa (p. 44) ends the story by recounting how, "After they left there was always a cotton crop failure and cotton would not grow high any more and soon no more cotton was cultivated."

In a companion article, Malcolm Farmer (1955) suggests Ho-vi-itci-tu-qua was not Elden Pueblo but was one of the sites on Anderson Mesa, e.g., Grape Vine Pueblo.

Nequatewa, Edmund

1967 *Truth of a Hopi.* Museum of Northern Arizona, Flagstaff. [Originally published in 1936].

As the subtitle to the book notes, this is a collection of "Stories relating to the origin, myths, and clan histories of the Hopi." Nequatewa was from Shungopavi Village. He was a member of the Sun Forehead Clan and the One Horned Fraternity.

In four chapters, Nequatewa provides an extensive account of how the Hopi people came out from the underworld after life became inharmonious. He also provides several accounts of how certain clans received their names and settled in certain villages, e.g., Shungopavi and Oraibi. More recent Hopi history is also recounted, including the coming of the Spaniards, the marking of a boundary line with the Navajos, and the split of Oraibi that led to the founding of Hotevilla and Bacavi.

In one of many footnotes, Mary-Russell F. Colton, the editor of the book, notes that (p. 126), "The Grand Canyon is 'Muski,' the place of the dead. It is thought of a long passageway through which a painful progress must be made by the 'spirit,' like the entrance through which the people came up from the underworld; in other words, a part of the Sipapu, which was covered by the ocean.

In recounting the coming of the Spaniards, Nequatewa describes how the Catholic priests (Tota-achi) sent Hopi men to different springs to get water do drink and how the priests always sent away men with pretty wives. In this account, the priests sent Hopi men to the Little Colorado River or to Moencopi.

Numkena, William

1967 Interview of William Numkena conducted by Charles Peterson. Doris Duke Oral History Project, Number 150b. Ms. on file at Special Collections, Marriott Library, University of Utah.

Numkena, a resident of Moencopi, was born in 1917. He remembers the Hopis traded with the "Go-in-ne-nas," saying, "they were from the Grand Canyon area called the Supais and Hualapais and they used to come and trade for the same things as the Paiutes" (pp. 2-3). The Hopis traded agricultural products for baskets.

Office of Commissioner of Indian Affairs

1939 "Minutes of Conference on Hopi Extension Area held April 24, 1939. Office of Commissioner of Indian Affairs, Washington, D.C." In Louis A. Hieb Collection, Special Collections, MS84.3, Manuscript Collection #245, Material documenting the history of the Hopi Traditionalist Movement. Northern Arizona University, Cline Library, Flagstaff, Arizona.

Present: Peter Nuvemsa, Bryon P. Adams, Fred Lomayesva, Samuel Shingoitwa, Hopi Delegates; Seth Wilson, Superintendent, Hopi Agency; John Collier, Commissioner of Indian Affairs; and Oliver LaFarge, ex officio.

The purpose of the meeting was to present a map of the area the Hopi people desire, along with statements of the reasons why the Hopi claim this area.

The minutes contain much information pertinent to Hopi land claims. The following passages are relevant to the GCES project in that salt and ceremonial ties to the Colorado River area are mentioned.

Nuvemsa: "And now this area, which we originally believed is our area, through our ceremonies, and now that we have come to a new day in which we put in our deepest thought as to the reason why this area has been taken away from the Hopi people through the reasons that are still puzzling to us."

"Every year we hold an annual ceremonial which takes in our claim which is outlined by the outside circle."

Collier: "You mean the area bounded by the Rainbow Bridge and Colorado River on the south and east, below Winslow and almost to Gallup on the west and north?

Nuvemsa: "That is the sacred area. We have taken into consideration how we might live after the settlement of this area, and how we may obtain our timber, salt, and game in this area. Inside this area is a shrine to be of main purpose to the Hopi people."

Nuvemsa: "... the Hopis feel they have a right to this area as shown on the map because they still have in their hearts that they have controlled this area and as stated, it involves their ceremonies."

O'Kane, Walter Collins

1953 *The Hopis, Portrait of a Desert People.* University of Oklahoma Press, Norman.

One chapter in this book, entitled "Man and Mystic," describes the Hopi world view (pp. 156-177).

With respect to the collection of wild plants, O'Kane observes (p. 161), "... when a wild plant is cut off or dug up, as it is, for example, in securing a planting stick, tradition requires that it first be sprinkled with a bit of sacred corn meal, symbolizing a silent prayer to its spirit. It is a living thing, the work of the creator of all life, and is not be wantonly destroyed."

O'Kane also observes that the Hopis believe their thoughts have an effect on their own well-being and the well-being of others (p. 167).

O'Kane notes that a belief in immortality is "firmly and universally accepted" (p. 169). He says, "... there is no real dividing line between life now and life later. They are one and the same thing. That which exists here and which can be experienced through our physical senses is only one aspect of existence. If the body ceases to function, the spirit is not changes thereby. As some one has said, the Hopi view may be likened to the thought that, when a man dies, he merely wakes up."

Page, Gordon B.
1940 Hopi Land Patterns. *Plateau* 13(2):29-36.

This brief article resulted from an economic survey of the Hopi Reservation conducted for the Soil Conservation Program.

With respect to Hopi land claims, Page (p. 29) note,

> There are various conflicting claims made by the Hopi relative to the land they use. The Hopis, first of all, claim the North American continent from ocean to ocean. This claim is always presented as being a basic consideration in boundary discussion. The second claim is more conservative and approximates the area formerly occupied by the ancestors of the clans which now make up the loosely organized "Hopi Tribe." This is an area bounded roughly by the Colorado-San Juan Rivers to the north, the present Arizona-New Mexico state line on the east, the Zuni and the Mogollon Rim to the south, and the San Francisco Peaks to the west. It is an area of shrines, sacred natural features, eagle trapping locations, and regions where salt is obtainable. It is necessary to realize concerning this second claim that actual use is not the important thing. What is important is that this area be recognized as a sacred area. Use is made of it by priests who visit the shrines to perform certain rites, to trap eagles, and to gather various herbs and minerals necessary to their rites. The Hopi does not think of this region as an area to be used for agriculture or for exploitation of natural resources.

The rest of the article concentrates on settlement, agriculture, livestock and relations with the Navajo within "District 6," an area Page considers to be the Hopi's basic "homeland."

Page, Jake

1982 Inside the Sacred Hopi Homeland. *National Geographic* 162(5):606-629.

This article describes a four day, 1100 mile journey made by eight Hopi priests, two Hopi drivers, Jake Page and his wife to "visit the eight principal shrines that mark the boundaries of the Hopis' ancestral land" (p. 607).

One photograph shows the Hopi priests making a prayer offering on a ledge overlooking the Grand Canyon. The caption for this photograph reads (p. 609), "Prayers of thanks for a salt deposit nearby are offered ..."

One of the pilgrimage shrines is "*Co Nin Ha-hao-pi*" at the Supai Descent Trail" on the southern rim of the Grand Canyon. The other shrines include *Toko Navi* (Navajo Mountain), *Tusak Chomo* (Bill Williams Mountain), *Honoapa* (Bear Springs), *Yoche Ha-hao-pi* (Apache Descent Trail), *Tsi Mon Tu Qui* (Woodruff Butte), *Nah Mee Tuikah* (Lupton), and *Kywestima* (Betatakin Ruin).

Page (p. 607) observes that "... sacred sites themselves are unnoticeable, merely locations near rocks or bushes where generations of Hopis have made offerings." He offers his opinion that "The eight shrines, in a sense, mark the last staging area in the final migration inward to this place where they became Hopis and built their homes" (p. 612). He adds (p. 612), "The pilgrimages have been made for centuries and will continue - expressions, the Hopis explain, of their continuing sense of responsibility for this area."

Former Chairman Abbott Sekaquaptewa (p. 626) is quoted as saying "But the most important thing is the shrines. The elders say that the shrines are our standards—the way white people raise flags over their territory. Without our shrines, our inheritance, we simply cannot continue as Hopis."

Page, Jake

1990 The Unwritten Book of Good Manners. *Mother Earth News* March-April, no. 122:44, 46, 132.

In this article, author, Jake Page, begins with the observation that Southwestern Indians see their environment as central to their world. He uses a literary twist to pinpoint the center of these Natives' worlds to Earth navels--"places where 'the people' emerged into this one [world]" (p. 44). Page writes:

> Far to the west, near the confluence of the Colorado and the Little Colorado rivers, is another one, called *sipapu* by the Hopi. It's the point from which these "oldest of the people" emerged long ago and began the long treks that resulted finally in their settlement of some remote mesas above the Painted Desert in northeastern Arizona about a thousand years ago.

Page discusses the mix of spirituality and pragmatism with which Southwestern Indians view their surroundings (p. 46). He debunks the myth of Indians as "natural ecologists who raise their fists in rage at every insult (real or imagined) to their mother" (p. 44). But he points out that, still, there is a deep sense of respect for the earth held by these Native Americans. He expresses his appreciation that (p. 132):

> here in the Southwest at least, there is a small fraction of the population that still holds the notion that the earth is, in utter reality, a mother--a truly living being (which is why the earth is sacred), a being who needs to be dealt with by means of a fine sense of reciprocity, by means of rules of etiquette that are not that hard to understand.

Page, Susanne and Jake Page

1982 *Hopi* . New York: Harry N. Abrams, Inc.

This picture book of the Hopis is a collaborative work by photographer, Susanne, and writer, Jake, Page. Together they produced an exciting photojournalistic look at Hopi life and customs in the 1970s and early 1980s. Although focusing on events and practices of the present, the photographer/writer team also provide useful information about the past which directly bears on and influences the culture of today's Hopi people.

The authors declare that, "Our perceptions are, of course, our own, informed by no academic specialty and no personal ideology (p. 20)." Although highly unlikely that a work could be completely unencumbered by one's personal ideology, the authors make this claim to convey that their effort throughout the book is to record what the Hopi people have shared with them rather than what they have set out to discover about their hosts. The result is a sensitive portrayal of who the Hopis are and what makes them distinct--no more, no less.

The legal domain of the Hopi nation is confined by the boundaries of its reservation. Spiritually, however, the Hopi world extends much further. Jake Page delineates the extent of that domain, known by Hopi as*tusqua* , "the land." He writes (p. 205):

> It extends from Tokonavi (Navajo Mountain, across the border in Utah) to the point on the New Mexico border where Route 40 leaves Arizona, to the northern edge of the White Mountain Apache Reservation, to Bill Williams Mountain, west of Flagstaff, to the rim of the Grand Canyon, where the long trail begins that winds down to the Havasupai Indian Reservation.

The meaning of *tusqua* to the Hopis is profound. In a 1951 report to the Commissioner of Indian Affairs, leaders from nine religious societies in Shungopavi summed up their views as such (pp. 216-17):

> 1. It is from the land that each true Hopi gathers the rocks, plants, the different woods, roots, and his life, and each in the authority of his rightful obligation brings to our ceremonies proof of our ties to this land, Our footprints mark well the trails to these sacred places where each year we go in performance of our duties.
>
> 2. It is upon this land that we have hunted and were assured to our rights to game such as deer, elk, antelope, buffalo, rabbit, turkey. It is here that we captured the eagle, the hawk, and such birds whose feathers belong to our ceremonies.
>
> 3. It is upon this land that we made trails to our salt supply.
>
> 4. It is over this land that many people have come seeking places for settlement, and finding Shungopavi established, asked our leaders for permission to settle in this area. All the clan groups named their contributions to

> our welfare and upon acceptance by our leader were given designated lands for their livelihood and for their eagle hunting, according to the directions from which they came.
>
> 5. It is from this land that we obtained the timbers and stone for our homes and kivas.
>
> 6. It is here on this land that we are bringing up our younger generation and through preserving the ceremonies are teaching them proper human behavior and strength of character to make them true citizens among all people.
>
> 7. It is upon this land that we wish to live in peace and harmony with our friends and our neighbors.

Many places on the Hopi ancestral lands, including salt mines, eagle shrines, clan shrines, ruins, special markings, and San Francisco Peaks, are visited by Hopis each year in order "to pray for the continuance of Hopi life." But, according to our author, "Perhaps the most important pilgrimage is one made not every year but periodically, when selected priests travel to the shrines that denote the boundaries of the Hopi ancestral land (p. 217)." During the 1980 pilgrimage to these sacred shrines marking the boundaries of *tusqua* , Susanne and Jake were permitted to attend and record the events. Specifically related to the group's visit to the Grand Canyon, Jake writes (p. 220):

> The next stop was . . . a ledge a few hundred feet down in Grand Canyon, below Grand Canyon Village; this was not one of the territorial shrines but a place the priests traditionally stopped at to pray for the sacred salt that is located in a deposit on the canyon floor near the confluence of the Colorado River and the Little Colorado, the location also, the priests told us, of Sipapuni.

The party's activities in the Grand Canyon continued further downstream. Jake reports (p. 220):

> From there, we went to Po ta ve taka (Point Sublime), a drive of several hours west through a state park and then through seemingly endless meadowland, to the narrow and rocky beginnings of a canyon that leads down circuitously to the reservation of the Havasupai Indians, the beginning of the Havasupai Trail. . . . The priests went off on foot, down into the canyon, arriving eventually at a great overhang in the gray cliff wall. . . . Nearby, on a rock upon which the priests placed their pipes and cornmeal pouches, were what seemed to be fresh rock carvings of clan symbols. "That is where," they said, "we made our marks last time." There was an eagle boldly carved in the boulder.

To Jake's disbelief one of the priests walking on two aluminum crutches descended this steep, treacherous trail down to the Havasupai shrine. The author marvels (p. 220):

> He [the Hopi priest] had nothing but the determination, I thought, to be certain that he had seen with his own eyes those things that were crucial to Hopi

> survival, so that he could say to any Congressmen and Senators and anyone else who saw fit to intervene, "I've been there."

Other significant references to Hopi use of the Grand Canyon are found in the captions of Susanne's photographs. Describing the picture of six priests sitting in a circle smoking their ritual pipe on the rim of the majestic Grand Canyon, the authors write (p. 231):

> Several hundred feet below Grand Canyon Village, a rocky promontory juts out into the great yawning space of the canyon itself. On the way down, the priests point out an ancient ruin high in the canyon wall across the way. The Hopi visit this place not for the purpose of marking ancestral land but to commune with the spirits of a sacred shrine where salt is gathered in the canyon.

Likewise, the caption beside Susanne's photograph of a rock covered by clan markings also refers directly to Hopi use of the Grand Canyon for salt gathering. The caption reads (p. 144):

> Beside the trail that leads from the Hopi mesas to an ancient shrine where salt was gathered in the Grand Canyon, a large boulder bears the markings of clans which carved their emblems into the rock each time they passed on a pilgrimage.

Furthermore, Jake discusses the importance of the Grand Canyon as a place where one returns at death. In an account of one family struggling to meet the prescribed burial practices upon the death of a family member, the importance of achieving this re-entry into the Underworld becomes apparent. Jake records the event as follows (p. 188):

> When people die, they return to the Underworld through Sipapuni and with the aid of Masauwu, the god of death. But certain things must be done properly in their behalf, and there are what might be regarded as side trips to be made before--and even after--reaching the Underworld.
>
> A family we knew had a son named Tony, in his twenties, living away from the reservation in a large city. . . . The y had received word that their son had been involved in an accident and had died violently. . . . [I]t was essential to have the body sent back home so that it could be buried by the fourth day.

Because of delays in the city's police procedures, the body was not returned until the fifth day. Jake continues his report:

> Already grief-stricken, the family was nearly hysterical about the timing, since if their son was buried too late he might never be able to reach the Underworld. Immediately upon the arrival of Tony's body, on the fifth day, the appropriate rites took place. His hair was ritually washed with yucca soap, and food was put in his mouth by his aunts. Special food was placed near the grave for the spirits. All Tony's possessions were placed in the grave with him, his aunts added heaps of blankets to keep him warm on his journey, and the grave was sealed.

That night the family received a message from Tony. He had made it rain on them and their cornfield to notify his family that all went well and he had made it to the Underworld. Jake concludes (p. 188):

> As the family had hoped, Tony's spirit had become a cloud and had paused over the family's house and rained on them, to let them know that despite the delay things had been done correctly, the family's hearts had been right, and he was successfully off on his journey. Hopi believe that death is a birth into a new world, the world of the spirits, of kachinas, of communication with the living in many ways, and that the living can, if they wish, communicate with those who have passed on.

In another story Jake tells, this time about women and the many rites surrounding their wedding robe, the Grand Canyon once again manifests as the homing place of the deceased spirits. The author explains that when a married woman dies (p. 111),

> she will be wrapped in the robe that she kept throughout her life . . ., and she will be as pure again and as young as when she was married. She will stand on the edge of the Grand Canyon. She will spread her robe and step onto it and descend like a white cloud to the home of Hopi souls.

Hopi attitudes toward "stewardship" of the land also receive attention in this work. Most useful is Jake's discussion on the ways Hopi create and maintain a sustainable relationship with their environment. He writes (pp. 57-8):

> The assumption that the Indians somehow had developed cultures that lived passively on the land, merely taking what it offered them, and only what they needed, was fallacious. The Hopi spend as much time seeking to manage and manipulate the environment as civil engineers do. Their goal is survival. Their means are not as immediately dramatic or noticeable as building a great dam or a transcontinental highway system, but their techniques have so far proved reliable and enduring.
>
> For a millennium the Hopi have managed their environment by means of their ceremonies: the land and their annual ceremonial cycle are inextricably linked. For an agricultural society in a semi-arid land . . . , it is a matter of survival that the rains be adequate and timely. To see to this, throughout the year the Hopi beseech a pantheon of deities to bless them with moisture in the proper places and at the proper times.

The many rites and practices involved in this ceremonial cycle are directly dependent on the use of certain animals to act as messangers between the Hopi and their deities. Jake remarks that (p. 191),

> Snakes are among the creatures whose spirits are very important. After the Snake Dance they return to the desert, where they go down their holes to the Underworld to explain that the Hopi have done well and the messages can go forth to the spirits to bring rain.

Even more essential to preserving this sustainable relationship the Hopi have with their seemingly unhospitable environment is the eagle. Our author writes (p. 191):

> It is the eagle that sits on the roof in a Hopi village from June until the end of the next month, watching from its vantage point the day-to-day goings-on of the villagers, observing with its legendary eyesight whether the people are carrying out their obligations. It is the eagle that is then released, in a sense, so that its spirit can fly home to the gods and carry the message that all is as it should be on the mesas and the rains may continue to come.

The rites delineating the proper procedure for eagle collection including where a clan goes, when is the proper time, and how the collection should proceed is an intricate affair. Jake describes it as such (p. 192):

> In the body of knowledge of the Hopi there is what might be called an eagle map, on which the lands stretching away from the Hopi mesas in all directions are carved up into segments. Each large tract is earmarked for a particular clan from a particular village, or for one of the various religious societies. It is to these tracts that the leaders of certain clans and religious societies go each year to collect the eagles.
>
> Normally, the man in charge for a given clan from a given village goes out to his eagle grounds in late February and, at a shrine (sometimes a small rock cairn), offers prayers and beseeches the mother bird to give him an eagle. If the man has lived properly during the preceding year, the mother will grant his prayers. The young are born in the spring, and in late May and early June the men go forth to check the nesting areas.

As mentioned above, the eagle would then live in the village for just over a month observing the behavior of the Hopis. At the end of July comes the Home Dance which signifies the time to "send home" the eagle. Jake describes this process, reporting (p. 195):

> Henry and his helpers "sent Hyeouma [the family's eagle] home," smothering the eagle in cornmeal, and took it to its burial place. They removed all its feathers except those on the head and two primaries, one on each wing. . . .
>
> But Hyeouma's spirit would remain in the village, too, and also find its way to many of the sacred shrines of the Hopi. Hyeouma's wing and tail feathers would be fashioned into cornmeal objects and used in the village for generations. The down feathers would become pahos, prayer feathers that would bestow blessings on shrines and on many people in the village and elsewhere.

Parnell, Rod

1986 Letter to Bob Dawson. Ms. on file at Hopi Cultural Preservation Office, Kykotsmovi, Arizona.

Parnell is associated with the Geology Department of Northern Arizona University. This letter reports on the results of a chemical analysis of salt from the Hopi Salt Mine collected by Bob Dawson, an hiker who has made several trips to the Hopi Salt Mine. Parnell reports, that "The Hopi Salt appears to be mostly that - Salt (NaCl, or Halite). The other major constituent is thenardite, which is a sodium sulfate salt (Na_2SO_4)."

Parsons, Elsie Clews

1921 The Pueblo Indian Clan in Folk-lore. *Journal of American Folklore* 34(132):209-216.

This essay examines the Puebloan clan system (p. 209), "... which is native theory is unchanging and unified, and in actuality a flux of many currents."

Parsons observes (p. 209) that,

> Clan migration traditions, as far as our records go, are most comprehensive and developed among the Hopi. To Pueblo migration tradition there is a twofold version, — the esoteric, which is known only to special persons, keepers of the tradition; and the exoteric, which is of general knowledge. The chief distinction between the esoteric version and the exoteric appears to be in the greater abundance in the esoteric tradition, of localization of details.

In this regard, Parsons contrasts the esoteric versions of clan traditions collected by Fewkes at First Mesa with the exoteric versions she collected at First Mesa and that Voth collected at Third Mesa.

Parsons notes that (p. 211),

> The Pueblo sense or concept of clan solidarity is expressed in migration tradition; it is also expressed in the association between clan and ceremonial. Among the Hopi, the association is made in theory through migration tradition. The clan, in its journey, encounters a supernatural, who affiliates himself with the travelers, thereby giving them his cult or ceremony.

Parsons, Elsie Clews

1939 *Pueblo Indian Religion*, two volumes. University of Chicago Press.

This book provides a comprehensive, descriptive study that compares and contrasts Pueblo Indian religions.

With respect to salt, Parsons (p. 196) notes "One of the War Brothers turns himself into salt and thus gives himself to Hopi travelers to Grand Canyon."

For all of the Pueblos, Parsons notes that (p. 216),

> With few exceptions life after death is envisaged as the same as before death; the deceased journeys to a town where he joins a group such as he was associated with in life—racers, hunters, curers, dancers, or rain-makers who may be thought of as clouds or lightning. The major exceptions are Hopi, and they express the idea of punishment after death, in itself exceptional in Pueblo ideology. On the road to the *sipapu* in the west, the place of Emergence where the Hopi dead return, or some of them, an actual spot in the wall of the Grand Canyon (Oraibi), the breath body is met by Tokonaka, an Agave spirit sentinel. If Tokonaka finds the traveler good, he allows him to pass on; otherwise he makes him go up to a forking trail to the four fire pits. From the first pit the breath body may come out purified and be allowed by the Tokonaka in charge to return to the main trail. Otherwise the breath body has to go on to the second fire pit. If good on emerging, it is changed into a beetle; otherwise it goes on to the tired pit. If it emerge good, it changes into an ant; otherwise Tokonaka takes it to the fourth pit to be consumed and remain soot (Walpi). Second and Third Mesa tales of the youth who takes a narcotic, "dies," and journeys to the Skeleton house express the idea of punishment still more plainly. The youth passes by a very wicked one "who does not want rain in summer" and so offends the Clouds that they run away, a murderer who puts something bad into somebody, and a woman carrying stones in a burden basket, the bowstring which is the tumpline cutting into her forehead. These witches and sexual offenders are all detained on the trail which after all leads them only to the Agave man and his destructive fire where they become smoke, unhappy, unfed—mere smoke. In another Hopi tale witches are said to become snakes, bull snakes, after burial. Killing the snake liberates the spirit, allowing it to proceed to Skeleton house.

In a chapter on "cosmic notions," Parsons recounts a version of the Hopi origin account (pp. 236-242). This version concludes with the discovery that when people die they return to underworld through the hole where the Hopis emerged where they live forever.

With respect to prayer-sticks (pp. 270-285), Parsons (p. 270) says,

> There is no ceremonial ... in which, in some connection, prayer-sticks are not offered or used. Indeed, it can be said that Pueblo ceremonial consists of prayer-stick making and offering together with prayer and other ritual. Buried in field or riverbank or riverbed; cast under shrub or tree or into pits, sunk in water, in springs, pools, lakes, river, or irrigation ditch; carried long distances to mountaintops; immured in house or kiva wall or closed-up niche; set under the floor or in the rafters, in cave or boulder or rock-built shrine; placed on altar or around image or corn fetish ... held in hand during ceremonial or cherished at home for a stated period or for life, prayer-sticks are used by members of all ceremonial groups, and in the West by "poor persons," even by children.

Parsons (pp. 285-299) also describes prayer-feathers, which are feathers loose or tied together but unattached to a stick. She notes (p. 289),

> A long feathered string is used by the Hopi as a prayerful expression, in particular for propitious journeying. It is laid by travelers on the trails to the salt deposits. It is laid on trails over which the Spirits are expected to travel into town or out, as, for example, on the trail to a spring from which water has been fetched for ritual purpose.

Citing Dorsey and Voth, Parsons notes that one type of Hopi prayer-feather is named *pühtabi*, "road placed," i.e., road marker. There is also a short feathered string, *pühu*, road, with one twisted string, and one single string. The *nakwakwosi* only has the twisted string.

Prayer sticks and prayer feathers are either "pay" or convey a request to the spirits (p. 291).

Cornmeal is also associated with prayers and is offered in a variety of contexts. The Hopi name for prayer-meal is *Homñumni.*

Pattison, N. B. and L. D. Potter

1977 *Prehistoric and Historic Steps and Trails of the Glen Canyon-Lake Powell.* Lake Powell Research Project Bulletin 45.

This brief publication summarizes research undertaken to document trails in the Glen Canyon region prior to flooding of Lake Powell. Trails were identified by the presence of steps and handholds that had been carved or chipped in the slickrock canyon scarps, and by the remains wagon roads and livestock trails. The bulk of the publication consists of an inventory that briefly describes the trail features and their provenience. A number of photographs provide useful illustrations of the various types of features. There is little explicit discussion of field methodology or recognition criteria used in the study. Pattison and Potter identify a trail system used by the Anasazi, and trails used by Paiutes, Navajos, Miners, and non-Indian Cattlemen. Little interpretation of the significance of the trails is offered, other than they represent use of the area by these groups.

Pendergast, David M. and Clement W. Meighan

1959 Folk Traditions as Historical Fact: A Paiute Example. *Journal of American Folklore* 72(284):128-133.

The thesis of this article is that the oral traditions of Indians often have a basis in historical fact. Pendergast and Meighan analyze Paiute historical traditions in relation to prehistoric Puebloan archaeological sites in southern Utah using four Paiute informants.

The Paiutes call the prehistoric occupants of Puebloan archaeological sites "*Mukwitch*" (p. 128). Pendergast and Meighan (p. 129) note, "Two informants stated that the *Mukwitch* had lived all over the Southwest; one specifically stated that the so-called 'Moki houses' (adobe granaries known archaeologically in eastern Utah) had belonged to the *Mukwitch*)."

According to Pendergast and Meighan (p. 129), "All informants said that the *Mukwitch* abandoned their towns and went south to the Hopi country." Pendergast and Meighan add, "The word *Mukwitch* is also used by all Paiutes to refer to the modern Hopi, a fact which indicates that the Paiute view the Hopi as somehow related to the Puebloid groups formerly occupying southern Utah."

Pendergast and Meighan (pp. 128-131) think that aspects of Paiute accounts of *Mukwitch* migration, economy, physical appearance, and Paiute-*Mukwitch* relationships are all supported by conventional interpretations of the archaeological record. They note the Paiutes consider information about the *Mukwitch* to be historical fact rather than a myth.

Pendergast and Meighan state,

> We conclude from our investigation that traditional histories may preserve historical information for several hundred years with a relatively high degree of accuracy. While traditions of the type reported here are probably limited to contact situations, the investigation of such folk histories is well worth the attention of anthropologists. The archaeologist in particular should explore the possibilities of correlating historical traditions with archaeological data, since the historical information may substantiate, and in some cases broaden, inferences based solely on archaeological materials.

Peterson, Charles

1971 The Hopis and the Mormons, 1858-1873. *Utah Historical Quarterly* 39(2):179-194.

This article reviews the history of Mormon interaction with the Hopis in the mid-nineteenth century, much of which took place at Moencopi and Oraibi.

The Mormons documented the occurrence of Hopi salt expeditions in the mid-nineteenth century. Marion J. Shelton observed in 1869 (p. 187), "The inhabitants travel very little, save it be those who go for salt, which they are constrained to carry on their backs from ninety to one hundred and fifty miles." Peterson notes that passing reference was made in the *Deseret News* in Salt Lake City of the existence of Hopi trails to the Colorado River, the Little Colorado River and to a source of salt beyond the New Mexico border. Jacob Hamblin found that three Hopis from Oraibi that accompanied him to Utah in 1863 had a good knowledge of trails along the south side of the Grand Canyon.

Philips, Barbara G., Robert A. Johnson, Arthur M. Phillips, III, and Nancy J. Brian
1986 *Monitoring the Effects of Recreational Use on Colorado River Beaches in Grand Canyon National Park.* Museum of Northern Arizona Bulletin 55, Flagstaff, Arizona. 131 pages, 23 tables, 22 plates, and 46 figures.

This scientific study investigated the human impacts of recreational use of beaches in the Grand Canyon National Park, and suggested methods for long term monitoring of these impacts. Adverse human impacts on beaches are documented for aesthetic indices (i.e., presence of human feces, trash, charcoal, and anthills), and for plant communities. Twelve beach campgrounds were chosen as study sites, and were investigated through sampling of aesthetic indices using a point-center quarter method, documentation of vegetation on 100 m. long line and belt transects, preparation of vegetation maps, and comparison of 1973 and 1982 aerial photographs. Predictably, the heaviest used beaches have the most impacts.

The number of people traveling through the Grand Canyon has increased dramatically (p. 3). Only 284 people traveled through canyon between the years 1869 and 1955. In 1967, 2,009 people journeyed through the canyon. This number increased 700% in the next six years, and in 1972 and 1973 over 15,000 people traveled through the canyon. Today, the National Park Service only permits travel by 15,000 people per year. Camping and lunch spots are concentrated on approximately 100 beaches, with 75% of the camping occurring on 50 popular beaches.

Philips et al. (p. 3) summarize human impacts by stating that,

> Human impact on beaches and terraces above the present high water line is long-lasting and visible (Dolan 1981). Dolan estimated that most foot traffic and trampling on beaches is concentrated within 90 m of the shore, with impact generally decreasing away from the main camping site. Impact is channeled by topography and vegetation and is highest where pathways cross or bypass these obstacles. Terraces above camping areas are seldom visited because of obstacles posed by western honey mesquite (*Prosopis glandulosa* var. *torreyana*) and catclaw (*Acacia greggii*) trees and high temperatures away from the water during summer months. Other visitor-caused impacts to the beach and terrace zones include habitat modification by fire, littering of beaches with trash and charcoal, vegetation damage or removal, trails and pathways to attraction sites, and burial or depositing of kitchen and human wastes.

The concluding chapter in the report makes numerous recommendations concerning the needs and preferred methods for long monitoring and management of human impacts on beaches in the Grand Canyon. A strong case is made for additional studies to differentiate human impacts from other ongoing environmental changes in the plan ecology of beaches.

Polingyouma, Eric

n.d. Salt Trail to Grand Canyon through Moencopi. Ms. on file at Cultural Preservation Office, the Hopi Tribe, Kykotsmovi, Arizona.

This is a unpaginated working document and map prepared by Eric Polingyouma while he was employed by the Hopi Cultural Preservation Office. The document describes and depicts the general routes of several Hopi trails to the Grand Canyon, as well as the location of several places with Hopi names. The trail network is plotted on a portion of the American Automobile Association *Guide to Indian Country* road map at an approximate scale of 1:760,200.

The first trail that Polingyouma describes is the "ceremonial trail" to the Grand Canyon Salt. This trail used primarily by Hopis from Third Mesa villages during the collection of salt during rituals associated with the Wuwchim initiation. This trail was also used, however, during expeditions to collect salt for domestic purposes. Polingyouma notes that his description is brief and does not detail esoteric ritual activities that occur during use of the trail.

The Third Mesa ceremonial trail runs in a westerly direction past Mount Beautiful. At Howell Mesa a trail segment with a terminus at Hotevilla joins this trail. The trail then crosses Coal Mine Mesa and runs to the north of Highway 264, which closely follows the Hopi trail to Moencopi. From Moencopi, the trail proceeds in a northwesterly direction to Moenave, and then to Tutuvehni, where there was an overnight camp. Polingyouma notes that each member of the party usually put their clan symbol on a rock before proceeding the next day. There are few springs or shady areas between Tutuvehni and the Grand Canyon and few stops were made. A number of cairns or rock piles mark the trail in this vicinity. After a ritual visit was paid to Salt Woman, the Hopis would camp overnight at the head of Salt Trail Canyon. The trail beyond this point is steep and animals were not used. Part of the food needed for the return trip would be stored while the Hopis proceeded on foot. It took one day to travel down Salt Trail Canyon and the Little Colorado River with several stops for ritual activities at Hopi shrines. One day was spent in collecting salt. Another day was spent in traveling out of the Little Colorado River Gorge.

Polingyouma notes the trip to the Hopi Salt Mine usually lasted about seven to ten days. Upon return, the young men collecting salt would deliver their salt to their paternal aunts. There was a ceremonial hair washing, and new Hopi names were given. Following a supper, the men would recount their story of their visit to Hopi Salt Mine to elders and uncles. After this recounting, the men would return to the home of their mother.

Hopis from Oraibi and Hotevilla would use the same trail to the Hopi Salt Mine but schedule their expeditions at different times. Polingyouma notes that Hotevilla had their last initiation about 1940 and that since that time the trail has been used less.

He also observes that through time the foot trails were used by pack animals, wagons and, more recently, vehicles. Several attempts were made to use wagons to get salt for domestic purposes but this was very difficult and time consuming. The wagons were parked on top of Salt Trail Canyon and several hikes to the Salt Mine were conducted to haul out a load of salt. The introduction of commercial salt obviated the need to collect great quantities of salt from the Hopi Salt Mine for domestic purposes.

Polingyouma also describes an alternate trail from the Second Mesa villages to the Hopi Salt Mine in the Grand Canyon. This trail begins in the vicinity of Shungopavi on Second Mesa. This trail heads in a westerly direction past Ba-euts-vi (Little Burro Spring), and Masiba (Gray Spring). At Masibi the trail is joined by a trail segment that originates at Oraibi. The trail continues past Honanba (Sand Springs) and Sikaba (Yellow Spring) to Komuf Chomo (Black Point), on the west side of the Little Colorado River north of Wupakti. At Black Point the trail has three branches. One branch leaves Black Point and follows the Little Colorado River, passing "Old Man Salt" a little upstream from Salt Trail Canyon, and continuing to the Hopi Salt Mine. This trail is sometimes referred to as the "bottom trail." A second branch of the trail network heads in a westerly direction from Black Point past Kalawisa (Red Butte) and Cataract Creek. The terminus of this trail is off the map plotted by Polingyouma. A third branch of the trail heads in a northwesterly direction from Black Point and then in a westerly direction, running south of the Grand Canyon Village to the Havasupai Indian Reservation. Hopis from Third Mesa could access this third branch though a trail that headed in a southwesterly direction from Moencopi past Shadow Mountain and the Conin Naugh Gnabi (Conin Crossing), on the Little Colorado River west of Cameron. The trail from Moencopi merged with the trail from Second Mesa on the south side of the Little Colorado River.

The "Old Man Salt" in the Little Colorado River Gorge was used by Hopis who were too elderly to make the more strenuous journey all the Hopi Salt Mine on the Colorado River. Pack animals were able to travel along the trail down the Little Colorado all the way to "Old Man Salt." At this point, the older men would watch over the pack animals at the "Old Man Salt Mine" while younger men would deliver prayer feathers to shrines downstream from "Old Man Salt," collect ceremonial materials, and gather salt from the Hopi Salt Mine.

Polingyouma notes that Paul Saufkie, Sr., refers to salt from the Grand Canyon as "Bukung Onga," Warrior Twin Gods, used in his society practices.

Plans for a salt expedition were usually announced at Soyalung, the Winter Solstice ceremony. Many people prepared feathers for the Grand Canyon and attached these to a paho stick. Polingyouma observes that even if the purpose of a salt expedition is to collect salt for domestic use rituals to deliver pahos to shrines along the trail are still carried out. Salt expeditions were usually made in August or September after the Mazeo Ceremony if "Festive Moon." This is a good time because rains have subsided and the canyon temperature is moderate.

Salt from the Hopi Salt Mine is heavy when collected because it is moist, making it heavy to carry on foot or on burros. The return trip to the Hopi Mesas was usually slow as a result.

Polingyouma describes how the Hopis used to store food and water along the trail so others following would have something to eat and drink. Hopi men making a salt journey would condition themselves by running daily and consuming little food and water.

To collect sacred water from Blue Spring in the Little Colorado River takes about a day and half of hiking on foot.

Polingyouma notes that there is also a salt mine in Verde Valley used by the Hopis. According to Hopi oral history, during the period of clan migrations the clans living in the Verde Valley traded salt to the people living on the Hopi Mesas.

Polingyouma notes that salt was a priceless commodity prior to the introduction of commercial salt. After the introduction of commercial salt visits to the canyon decreased. However, visits to the canyon as part of initiation process continued until initiation ceased at Third Mesa villages. Visits to the canyon are still made for the collection of herbs, clay, and other items used in ceremonies. Polingyouma notes that, "Societies still make visits, however, unannounced and the general public is unaware."

Pooler, F. C. W.

1910 Excerpts from Report Made Jan. 25, 1910 to Forest Supervisor F. C. W. Pooler, Forest Supervisor, on Roads and Trails in Grand Canyon Division. Unpublished ms. on file at the Hopi Cultural Preservation Office, Kykotsmovi, Arizona.

In this unpublished government report, Pooler itemizes historic roads and trails within the, then, Grand Canyon National Forest.

Item #24 describes the "Moki Trail.--Between Supai Village in Cataract Canyon and Navajo Reservation. Old Indian Trail, in poor condition and most of it abandoned."

Potter, Loren D. and Charles L. Drake

1989 *Lake Powell, Virgin Flow to Dynamo.* University of New Mexico Press, Albuquerque.

Chapter 5 of this general audience book reviews "Prehistoric and Historic Use by Man." The chapter focuses on prehistoric use of Glen Canyon by the Anasazi and historic use by Navajos, ranchers, miners, and river runners.

Potter and Drake note that a well-known trail at Wilson Canyon was used as a trade route by Hopi, Paiute, Navajo, and whites (p. 88). They describe the distinctive "Moqui steps" that were constructed to facilitate access up and down the steep Navajo sandstone cliffs that border the Colorado River. These are hand and toe holds pecked into the sandstone cliffs using stone implements. Potter and Drake observe that many trails constructed by the Anasazi were later used and improved by the Navajo stockmen using metal tools (p. 90). They note that the Trail Canyon trail and other Anasazi Trails connecting the San Juan River to sites on Cummings Mesa and around Navajo Mountain were used by Hopi, Paiutes, Navajos, and whites.

Powell, John Wesley

1872 *Survey of the Colorado River of the West.* 42 Cong., 2 Sess., House Misc. Doc. 173, Serial Set #1526, pp. 1-12.

In this report, Powell briefs the Congress on the progress of his work in the Colorado River region. He provides one useful statement about Hopi use of the Grand Canyon.

He explains that after crossing the Colorado River in a ferry constructed by members of his party, the group set off toward the Hopi Mesas. He writes (p. 4):

> Our route lay along the base of a line of cliffs, and we were rejoiced to find a good trail in the direction in which we wished to travel. We had anticipated much trouble in finding water, but from time to time the trail led to springs or water-pockets, and these at such short intervals that no serious want was experienced.

Powell, J. W.

1961 *The Exploration of the Colorado River and its Canyons* . New York: Dover Publications, Inc.; originally published under the title *Canyons of the Colorado* by Flood & Vincent in 1895.

Included in this account of Powell's Southwestern explorations is not only the notes from his descent of the Colorado river system from Green River City on the Green river to the mouth of the Rio Virgen on the Colorado itself, but also the author's wanderings in the Grand Canyon region two years earlier and also one year after the major expedition was completed. The time span for all the explorations discussed in this book in total is from 1867 to 1870.

What Powell learns about the Hopis (whom he refers to as Mokis) is acquired mostly during that latter trip undertaken primarily on foot between September and November, 1870. At no point during Powell's descent of the Colorado river and its canyons does he mention seeing Hopis in that canyon, nor does he specifically refer to employing a Hopi guide to direct he and his party to or from that river. Powell's most direct reference to Hopis' connection to the Grand Canyon in his notes of the river's descent is in a discussion of a particular ruin. Powell writes: "From what we know of the people in the Province of Tusayan, who are, doubtless, of the same race as the former inhabitants of these ruins, we conclude that this was a kiva , or underground chamber in which their religious ceremonies were performed (p. 228)." Many other ruins were sited in the exploration, but none were specifically attributed to Hopi ancestry, yet, they were often tied to Pueblo origins. For instance, in the valley of the Little Colorado river Powell encounters many ruins which he accredits to "pueblo-building peoples (p. 49)."

It was during his 1870 expedition to the Grand Canyon region that Powell and party had the occasion to spend two weeks among the Hopis. During that stay Powell accummulated many notes, photographs, and sketchings of the tribe's living arrangements, organizational structures, language, dietary habits, ceremonial practices, and much more (pp. 49, 335-59, 360-64).

Powell, J. W.

1972 *The Hopi Villages: The Ancient Province of Tusayan.* Filter Press, Palmer Lake, Colorado [orig. 1875].

This pamplet reprints an article Powell published in *Scribner's Monthly* in 1875 that describes a visit to the Hopi Mesas that lasted nearly two months. Powell was accompanied to Hopi by the Mormon missionary Jacob Hamblin. On his journey, Powell traveled from Salt Lake City to the Grand Canyon to Kanab and then to Hopi via Moencopi. His map (p. 6) shows that he traveled from Moencopi to Oraibi following a trail that ran over the top of Howell Mesa (see below).

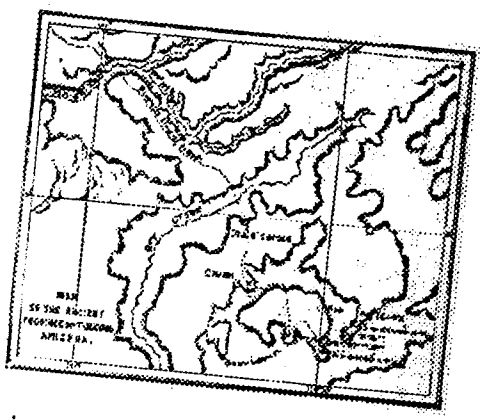


Figure: Map of the "Ancient Province of Tusayan" showing Powell's line of travel.

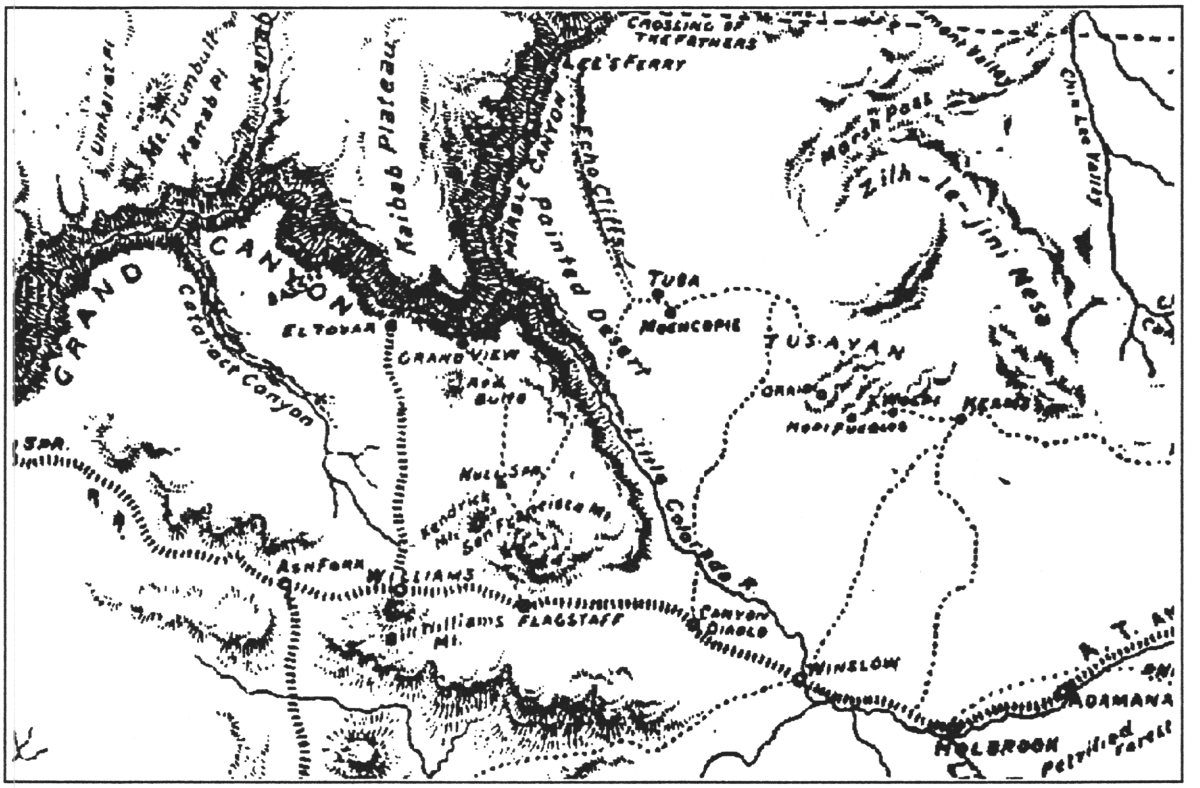
Powell provides a brief synopsis of the Hopi account of emergence (pp. 24-25), told from the perspective of Oraibi.

Powell describes the "vast" distribution of earlier "Shi-nu-mos" settlements, which he says extended from the Colorado Plateau to Salt Lake City. He recognizes the linguistic connection between the "Shi-nu-mos" and the Shoshones, Utes, Pai Utes, and Comanches. [In this regard, it is relevant to note that Powell used the term "Shi-nu-mos" to refer to the Hopis in his field notes taken in the Grand Canyon.]

Prudden, T. Mitchell

1906 *On the Great American Plateau: Wanderings among Canyons and Buttes, in the Land of the Cliff-Dweller, and the Indian of T0-day.* G. P. Putnams's Sons, New York.

T. Mitchell Prudden was an early and noted Southwestern archaeologist. This book comprises a travelogue presentation of information about the Southwest. The only aspect of interest to the Hopi GCES is a "Sketch Map" that shows the locations of major trails or routes of travel in 1906. A portion of this map, reproduced below, shows a route from the Hopi Mesas to Moencopi and Lee's Ferry, following the Echo Cliffs. A route from Moencopi to the Little Colorado River is also depicted. After crossing the Little Colorado River, this route continues on to Grand View at the edge of the Grand Canyon.



Pyne, Stephen J.

1982 *Dutton's Point, An Intellectual History of the Grand Canyon.* Monograph No. 5, Grand Canyon Natural History Association, Grand Canyon, Arizona.

This book reviews various conceptions of the Grand Canyon from a Euro-American historical perspective. Pyne covers what non-Indians thought about the Grand Canyon during the periods of Spanish military exploration, American scientific exploration, and, most recently, American popular-political culture.

Native American perspectives are beyond the scope of the book and Hopi receives only cursory mention. For instance, in discussing Spanish exploration Pyne (p. 3) remarks "With Indian guides to lead them, the Cárdenas party advanced to the Canyon rim ..." He does not specifically mention that these guides were Hopi.

Pyne's comments on cartography of the Grand Canyon region are interesting. He notes (pp. 4-5),

> Geographic exploration and cartographic synthesis evolved as much by throwing out bad data as by recording good. Moreover, that data did not appear as discrete units of a single, generally-accepted geographic vision as represented by a commonly-held base map, but as competing cartographic systems, each more or less exclusive. Early maps often differed as much in their whole as in their details.

With respect to Miera's 1777 map based on the Dominguez-Escalante expedition that passed to the north of the Grand Canyon near Lee's Ferry, Pyne observes that (p. 6),

> Miera obscures the main region of the Canyon, though he refers to the Marble Canyon segment as *mui escarpada* and shows the Little Colorado. Complementing the Garcés map, which fails to show the western bend of the Colorado, the Miera map fails to show the eastern bend. Like most maps of the period, its basic information is hydrographic and ethnographic.

Pyne (p. 10) notes that by 1862 Jacob Hamblin had explored the Grand Canyon region and , "like nearly everyone in the region, had found visits to the Hopi pueblos irresistible."

With respect to G. K. Warren's cartographically sophisticated 1857 map that consolidated the railroad surveys with previous information, Pyne observes that the Colorado River is sketched very lightly and the Grand Canyon is not identified by name. He notes (p. 11), "Compared to Spanish sources, less was known about the region than 80 years before."

Pyne (p. 17) notes that Egloffstein's 1861 map produced during Ive's expedition confused the relationship of the main stem and tributaries of the Colorado River, depicting the Little Colorado River as the main branch.

Quartaroli, Richard

1990 Controversial Book Review: The Hopi Salt Trail. Ms. No. 25887 on file at Library of Museum of Northern Arizona.

This term paper prepared for a Library Science class at Northern Arizona University reviews the controversial issues surrounding the proposed publication of *The Hopi Salt Trail* by Ekkehart Malotki. The paper draws upon Raymond (1990) for basic facts and for statements by Hopi officials. Quartaroli notes that the proposed publication will be useful to scholars and appealing to hikers who want to follow the salt trail but who have not researched it for themselves. He opines (p. 5), "Unfortunately, even with restrictions on its use to qualified scholars, it appears that vandals will make their marks known in increasing numbers, for even without this book they are able to find and desecrate sites and shrines." Quartaroli (p. 5) concludes it would appropriate to add the proposed book to scholarly libraries, adding a caveat that "... I would want to place restrictions on its use and availability, and limit it to 'qualified' researchers, whatever that means." The endnotes and bibliography provide useful citations to supporting reference material.

Anonymous

1980 Hopi priesthood leaders make shrine pilgrimage. *Qua Töqti,* Thursday, October 23, 1980, p. 1.

This article from a Hopi newspaper describes a recently completed "pilgrimage to ancient Hopi shrines which have traditionally marked the aboriginal boundary of Hopi land..." Dalton Taylor of Shungopavi led the group of religious leaders and "designated persons" on the journey to the shrines that is "made each year where prayer feathers (pahos) are deposited along with sacred corn meal for the general well-being of all people."

As described in the article,

> The shrines visited by the Hopi priests stretch from Toko'navi, what is now called Navajo Mountain in Southern Utah, to Ky-westima (Batatakin Ruins) and to the southern point of the Grand Canyon, to Bill Williams Mountain west of Flagstaff and on south to Honapa (Bear Springs). The route continues to Hopi Point on the Mogollon Rim (Chevelon Cliffs), to Woodruff Butte south of Holbrook and on to Lupton near the New Mexico Border.
>
> The present-day Hopi villages are located almost in the center of the boundary outlined by the ancient shrines. But, the entire four-state area of Arizona, Utah, Colorado, and new Mexico is full of ruins and hieroglyphics which Hopis believe are shrines left by their ancestors.
>
> According to Hopi teachings, about a millennium ago, a great migration began which was undertaken in accordance with ancient prophecies, in some cases forced by drought and other climatic conditions. This period is known as the "Gathering of the Clans."
>
> More recently, over a period of hundreds of years, ancestral groups -- as many as 30 different clans -- concentrated their communities in the area now occupied by the Hopi, forming Hopi society as it is known today.
>
> It is these abandoned residences left behind by ancestors of the Hopi that became part of a system of shrines marking the territories in which, to this day, Hopi elders still make pilgrimages each year.
>
> It is these lands that give the Hopi their special place in the universe, the confidence in their identity which they require to retain their unique and longlasting culture, while, at the same time, adapting elements of modern western society.

The pilgrimage included Percy Lomahquahu of Hotevilla, Alfred Joshonva of Shungopavi, Bert Puhuyestewa of Mishongnovi, Alph Secakuku of Shipaulovi and Alonso Joshonnva of Shungopavi. Nathan Begay and Fred Kootswatewa of Hotevilla assisted as drivers. The article describes how "Camp was set up at selected spots each night of the trip, the pilgrimage continuing to the next shrine early the following day." The trip "was successful and completed without any problems."

A photograph taken in front of a rock art panel accompanies the article, showing Dalton Taylor leading the Hopi spiritual leaders on the shrine pilgrimage.

Quinn, William W.

1983 Something Old, Something True: A Hopi Example of the Need for Cosmology. *South Dakota Review* 21(2):20-55.

This essay uses Hopi as an example to examine a universal human need for cosmology. In order to do this, Hopi cosmology is analyzed in its historical and mythological context.

Writing from a non-Indian perspective, Quinn treats Hopi beliefs and oral traditions as myths. Quinn (p. 21) points out that Hopi mythology is "alive." Following Mircea Eliade, he notes that a living mythology is always connected with a cult that inspires and justifies religious behavior. Living, oral mythologies have a dynamic character that assimilates individuals and objects as archetypes and events as categories. As new elements are added to the existing corpus of oral traditions, there is an increasing discrepancy between myths recorded in the nineteenth century and those recorded today. As an example of this process, Quinn refers to a version of the Hopi origin myth documented by Hattie Lockett that describes the emergence of the Mormons with the Hopis.

Quinn (pp. 24-26) provides a brief history of the Hopi people. He thinks there are two basic theories regarding the origin of the Hopi people. One is that they are descendants of the Kayenta Branch of the Anasazi. The second theory is that the Hopis migrated from the south. The second theory is largely based on the fact the Hopis speak an Uto-Aztecan language related to the Nahuatl language of the Aztecs, and by the wide distribution of petroglyphs delineating Hopi clans in an area from Mexico to Colorado. Quinn (p. 24) notes, "... it is believed by those who hold this theory that the Hopis were a migratory offshoot of one of the pre-Columbian civilizations of the interrelated Mayas, Toltecs, or Aztecs who came north with a somewhat developed culture." Some scholars think that this theory is supported by a corpus of Hopi migratory legends.

Quinn (p. 27) observes that an "appreciation" of Hopi cosmology requires an understanding of Hopi social structure and religion. He then states that, "Hopi social structure is bewildering." The indigenous classification of Hopi clans and phratries has long challenged anthropological analysis. Quinn (p. 28) thinks it is important to recognize that "Each clan and phratry, more often than not, has a somewhat different variant of its particular migration legend, and similarly of all tribal myths ..." Quinn (p. 29) points out that the work of Fewkes and Voth demonstrates that "myth variants occur relative to both mesa and pueblo within the Hopi tribe."

Quinn (p. 30) describes "... consistent effort of the Hopis to preserve the secret elements of their rites and myths and maintain their inviolability." Given this, "... we can never be sure how much a myth is whole, how much has been deleted, or which of the many variants is closest to the original or pristine myth." Quinn (p. 31) adds, "Further, the dynamic quality of the living mythology, while it allows the Hopis to retain their traditional religion, is problematic on another level: that of accretions to the corpus of mythology."

Given the nature of Hopi oral traditions, Quinn develops a method of deriving a "single yet representative composite formulation" using myths collected by three generations of anthropologists and other writers. He says (pp. 31-32),

> To summarize the various strata of complexity involved in formulating a Hopi cosmology, there are initially possible variants according to both mesa and pueblo, variants according to phratry, clan, and ceremonial society, since the same clans and ceremonial societies are to be found in different pueblos and mesas. Compounding this confusion are the historical and extreme secrecy of the Hopis with regard to what they consider the inviolable elements of their rites and myths, and the fluidic, absorbing quality of their mythology which is evidenced by the considerable difference in details from the recordings of the first ethnographers to the most recent. In order, then, to discern what the Hopis consider the true "shape of the universe" and the "form of the cosmos" ... the method adopted here is that of concentrating on the basic myth motifs found in all the variants, excluding all the discrepancies, inconsistencies, contradictions, and the variegated plethora of details which each clan, society, pueblo, or mesa group claims as the correct version of the same cosmological phenomenon.

The three basic genres of myths that comprise the foundation of Hopi cosmology are (1) cosmogonic myths (and origin myths), (2) emergence myths, and (3) migration myths. Hopi creation myths are distinct from emergence myths. Quinn (pp. 33-43) provides composite accounts of all three of these classes of myths.

Kachinas occupy a significant place in Hopi cosmology, Quinn (p. 4) says, "...they are both indispensable for the well being of the Hopis and indivisible from the souls of the dead ..."

Quinn (p. 41) quotes Titiev to make the point that, "The most fundamental concept in Hopi religion is a belief in the continuity of life after death."

Quinn (p. 42) combines various elements to formulate a Hopi cosmology,

> There is first Tawa, the Sun spirit, whose symbol is the Sun, creating the world from the endless space and part of his own substance. Under him are the other primary deities, existing either before or created along with the creation of the earth. Then there are the four worlds in this creation, drawn from the emergence myths, and the gradual growth/evolution of the Upper World. There is then the determination of the perimeters of the world, drawn from the migration cycle, whose main function, among the others, is to determine the center, the place of the Hopi where the blue corn grows best. Then there is the celestial cosmography, which gives sunlight by day and moonlight by night, and whose stars determine direction. Within this structure is the principle of duality: east and west,

> good and evil, up and down, and the concept of divine twins, which permeates and informs all activity and phenomena in existence. Finally there is a whole range of lessor deities, animal and vegetal, ubiquitous in nature, and the major concept of the kachinas, whose connection with the relatively sophisticated notion of eschatology, the continuity of life and death, and the place of the dead is inextricably interrelated.

Quinn (pp. 42-43) adds that the *sipapu* is a salient feature with much symbolism in Hopi culture. He points out the *sipapu* has a mutlivalent character that is extended into a triadic womb-underworld-kiva correspondence.

Quinn (p. 46-51) concludes by pointing out that archaic cosmologies, like Hopi's, function to explain and justify the existence of the world, people, and society; and to orient people with in a topological sense through cardinal directions and sacred geographical landmarks. He also notes that archaic cosmologies constitute a sacrality in which the creation and the universe essentially sacred. Quinn (p. 48) says, "... the specific cosmologies are contained within a sacred scenario—the greater framework within which the cosmologies rest is both spatially and temporally sacred."

Raymond, Chris

1990 Dispute Between Scholar, Tribe Leaders Over Book on Hopi Ritual Raises Concerns about Censorship of Studies of American Indians. *The Chronicle of Higher Education* 17, October, 37(7):A6,7-8.

This article summarizes the positions of two opposing parties in a conflict over appropriateness in scholarly pursuits. The difficulty of this issue--specifically, who has rights to meaningful and private information--is demonstrated in all its complexity in this struggle between Hopi scholar, Ekkehart A. Malotki, and Hopi elders who object to the publication of his newest manuscript.

Malotki, the author of previous works on Hopi culture and language, has recently completed an intensive study of the Hopi's salt pilgrimage to the Grand Canyon, which is a very significant act in the religious life of (certain) Hopi men. It is, Raymond states, "one of the last rites of a young man's passage into adulthood," in which he must complete "the arduous trek along the trail, which reaches more than 100 miles across the desert from one of the Hopi mesas in Arizona to the Colorado River" (p. A6). The elders of the tribe feel that the amount of information revealed in Malotki's book would threaten the sanctity of this rite by "widely revealing what should remain closely guarded knowledge transmitted only to a few privileged religious initiates" (p. A6). Malotki and his publishers at the University of Nebraska Press feel that the Hopi's position is arbitrary. They believe that guidelines should have been put in writing previously to make clear which areas of research they deemed off-limits to non-Hopi scholars.

Both sides are presented sensitively in this article. Raymond implies that Malotki acted in good faith and in many ways is the victim of a painful situation. Malotki's publishers see the author "as a scholar caught in the shifting currents of tribal politics" (p. A7). But, Raymond also clearly states the Hopis' position that they should have rights to those aspects of their lives and culture which are so significant (and basic to the perpetuation of their own cultural distinctness). Although guidelines might seem like a fair solution to the problem, as Raymond points out, this controversy is really about "the growing movement among American Indians to wrest control of their cultural identity and history from non-Indians" (p. A6). In this sense, guidelines would be grossly inadequate to the goals of the elders who want to reverse the roles of who responds to whom in the representation of their culture.

It is noteworthy that one of the most compelling interests of the Hopi tribe as a cooperating agency in the Glen Canyon Environmental Study is the protection of the salt mine about which Malotki has written. The tribe's effort is to demonstrate the significance of the Grand Canyon to the Hopis' religious lives and the sacred salt mine is one tangible example of the Canyon's importance to Hopi peoples in the past and present.

Reed, Erik

1952 The Tewa Indians of the Hopi Country. *Plateau* 25(2):11-18.

This article briefly traces the prehistoric and historic migrations of a group of Tewa people from Mesa Verde to the Galisteo Basin to the Santa Cruz valley to First Mesa. Tewa people moved to First Mesa during and after the Pueblo Revolt in the late seventeenth century. The Tewa-Hopis still speak their Tewa language as well as speak Hopi.

Reilly, P. T.
1973 The Refuge Cave. *The Masterkey* 47(2):46-54).

This is an attempt to correlate the archaeological record of a cave on the south side of the Colorado River near Marble Canyon with Indian traditions about its use as a refuge. Reilly notes (p.46),

> Various Indians had different identities for the people involved in the legend but the general theme was the same: one group pursued another which sought refuge in the cave; the first group then waited at the cave entrance and waited fro those within to emerge. Later in the vigil the quarry group was seen near the opposite rim of the gorge and it was deduced that the cave led under the river, allowing the intended victims to escape. Some versions of the story had Navajos chasing Paiutes, while others had Navajos pursuing Hopis. One told of Hopis fleeing from Paiutes.

Exploration of a cave near Marble Canyon by a number of different speleologists and archaeologists revealed the presence of cane arrows, two pahos, juniper bark torches, three Kana-a Gray ceramic vessels containing bundles of twine, and human feces. Two live owls were observed in the cave and there was evidence owls had roosted there for a long time.

Reily discounts the tradition of the underground passage, suggesting that a third group appeared on the north side of the river, leading the aggressors to think the group they had pursued crossed under the river. After the aggressors left, the pursued group was able to escape.

Reily notes that the Hopi eagle shrine map exhibit introduced in the Healing vs. Jones litigation depicts a Hopi eagle shrine near the cave. Based on this coincidence, Reily draws a number of conclusions. He suggests the cave (p.54),

> ... is a Hopi shrine, that the cordage and wands were part of owl snares, and that from early Pueblo times the cave had been visited to procure feathers for the making of *pahos*. Use of the cave would pre-date the probable entry of both Paiute and Navajo into the region.

Rice, Glen E. and Charles L. Redman
1992 Power in the Past. *Native Peoples* 5(2):18-25.

This article summarizes archaeological investigations by Arizona State University at the Cline Terrace Platform Mound in the Tonto Basin. It is a popular account prepared for the general public. Rice and Redman remark that some of the excitement of their research stems from their "growing realization that these structures are part of the history of native peoples who still live in the Southwest, especially the Hopi, Tohono O'odam, Pima, and Zuni."

To exemplify this, they note,

> A number of Hopi tribal elders visited the Cline Terrace mound in December of 1991. Although their command of English was excellent, they elected to speak to us in Hopi when discussing their traditions and relied on Leigh Jenkins of the Hopi Cultural Preservation Office to translate for us. Their oral traditions tell of Hopi clans building villages and living for an extended period of time in the Tonto Basin before being compelled by their own prophecies to continue migrations northward. A pottery bowl fragment made about AD 1300, found during excavations, possibly shows a representation of a kachina. Kachinas are important spiritual beings in the religions of the Hopi and other Pueblo peoples. Conch shell trumpets resembling those found at Hopi and Zuni villages have also been found in the Tonto Basin.

Richardson, Gladwell

1965 *Two Guns, Arizona.* Press of the Territorian, Santa Fe, New Mexico.

As is common with much of Gladwell Richardson's popular writing, it is sometimes difficult to separate fact from fiction in this pamphlet reviewing the history of the Diablo Canyon region of Arizona. Richardson combines well-researched and well-known history with details about alleged events that are difficult to attribute to reliable sources. Richardson begins with hyperbole, asserting that Two Guns, on the east side of Diablo Canyon, "... occupies one of the most important historical sites in the State" (p. 1).

Of interest is Richardson's suggestion that the route the Hopis took to lead Cardenas to the Grand Canyon in 1540 ran south from the Hopi Mesas to the Little Colorado, which they crossed at the "... ancient Hopi Ford, somewhere between Winslow and Leupp" (p. 2). He suggests the party then turned to the northwest to pass to the north of San Francisco Peaks. Following the Little Colorado River downstream, the party would have crossed Diablo Canyon near where it enters the river. This is a longer route than that suggested by historians.

Riley, Carroll

1987 *The Frontier People, The Greater Southwest in the Protohistoric Period.* University of New Mexico Press, Albuquerque.

Chapter 7 of this book provides summarizes what is known about the "Little Colorado Province" (i.e., Hopi and Zuni) in the sixteenth century based on documents from the Spanish entrada.

Riley considers the etymology of the term "Tusayan" to be somewhat of a mystery (pp. 181-182). This term, and its variants Tuçan, Tuçano, Tucano, Tuzan, were introduced by Coronado's expedition in 1540. Riley suggests Tusayan may be a Zuni word or a corruption of a Hopi word. He notes that Hodge rejected an alternative etymology, i.e., that Tusayan is derived from the Navajo work Tasaun ("country of isolated buttes), since he did not think Navajos were in the region in 1540. Riley, however, suggests there were Querechos near Hopi and Acoma in 1580 and he thinks these people were Navajos. After Coronado the Spanish expeditions arrived from the east rather than the south and the name of Hopi changes to Mohose or Mojose. Riley suggests this term may be Keresan, i.e., the Mosicha of Laguna, The Mo-ts of Acoma, or the Motsi of Zia, Cochiti, and San Felipe.

In a section on trade, Riley describes a large regional trading network that entailed the shipment of many goods, including bison, deer skins, turquoise, fibrolite, cotton and cotton products, pottery, shell, coral, mineral pigments, semiprecious jewels, parrot feathers and birds, metal objects, and salt (pp. 190-108). Hopi had an important role in this system. As Riley describes (p. 195),

> The Tusayan towns dominated the trade route from the upper Southwest to the Verde are and to the lower Colorado River area. Tusayan supplied Cibola, and through Cibola the rest of the upper Southwest and the Gila-Salt and Sonoran regions, with Verde Valley area pigments, and, at least the upper Southwest, with Gulf of California and California Pacific Coast shell.

Schellbach, Louis

1951 Letter from Louis Schellbach to Otis Martson, dated May 2, 1951. Ms. in "Hopi Salt Trail Paraphernalia" file at Museum of Northern Arizona Library.

This letter discusses Marston's correspondence regarding the Hopi salt pool. The letter establishes that Otis Marston was the author of letter to Schellback dated April 25 signed "O."

Schoolcraft, Henry R. (editor)

1854 *Information Respecting the History, Condition and Prospects of the Indian Tribes of the United States.* Philadelphia: Lippincott, Grambo & Co.

When the assistant surgeon of the United States army, P. S. G. Ten Broeck, arrived at Sichomovi village on First Mesa in 1852, he came with the express purpose of recording information about the Hopi Indians. Henry Schoolcraft included Ten Broeck's observations of the Hopi in his compilation of works on Indian peoples of the United States, published two years later. Although Ten Broeck reported no information which directly relates to the Grand Canyon, his observations provide some interesting anecdotes which suggest Hopi ties to the canyon and its tributary stream, the Little Colorado River.

On Ten Broeck's first day at the Hopi Mesas he learned that near the Little Colorado River, in a southwesterly direction from First Mesa, was a sacred spring to which Hopis would pilgrimage to pray for rain. Ten Broeck explained that: "When there is great drought in the valley, the Moquis go in procession to a large spring in the mountain for water, and they affirm that after doing so, they always have plenty of rain" (p. 82).

Ten Broeck included another ceremonial custom in his journal which possibly relates to the Little Colorado River. He reported that (p. 87): "The chief men have pipes made of smooth polished stone, and of a peculiar shape, which have been handed down from generation to generation. They say their pipes were found centuries ago, by their forefathers, at the bottom of the water, in a very deep ravine in a mountain to the west, and that they were found already made in their present form." The imagery of this description depicts a deep gorge similar to that of the Little Colorado River as it carves its way to the depths of the Colorado River.

Ten Broeck also included information in his journal which implies that part of Hopi oral tradition is a belief that they originated in the west. First, Ten Broeck discussed the role of the great Mother and Father in the creation of the world and then reported this story (p. 86):

> Many, many years ago, their great Mother brought from her home in the west nine races of men, in the following forms: First, the deer race; Second, the sand race; Third, the water race; Fourth, the bear race; Fifth, the hare race; Sixth, the prairie-wolf race; Seventh, the rattlesnake race; Eighth, the tobacco-plant race; Nineth, the reed-grass race. Having placed them on the spot where their villages now stand, she transformed them into men, who built the present Pueblos, and the distinction of races is still kept.

Although Ten Broeck reported nothing about the Grand Canyon here, his notes indicate that the Hopis with whom he spoke, understood their people's origins to be in the west.

Another of Ten Broeck's observations linked Hopi spirituality to the west. In this case, it was Hopi's role in the shell trade which assumed a mystical-type quality, with Ten Broeck claiming that, "They wear necklaces of a very small sea-shell, ground flat (doubtless procured from California), which, they say, was brought to them by other Indians who lived over the mountains to the west [probably the Mojaves], and say they obtain them from three old men who never die" (p. 87). The imagery of these three immortal deliverers providing sea shells suggests that these items held some meaningful place in Hopi spirituality.

Finally, it is interesting to note that editor Henry R. Schoolcraft, in an introduction to Ten Broeck's report, stated that the Hopi "possess no process of dressing . . . nor of tanning any species of skin, or converting it into leather" (p. 72). Although the accuracy of this statement is quite suspect, it is interesting that a witness (possibly Ten Broeck) might have deduced such a conclusion about the Hopi's manufacturing capabilities. Perhaps the Hopi's dependence on the Havasupai for providing hides was so great at this time, that the practice of tanning or treating hides was almost obsolete.

Schwartz, D. W.

1965 A Historical Analysis and Synthesis of Grand Canyon Archaeology. *American Antiquity* 31:469-484.

Schwartz reviews the sequence of ideas that led to the conceptual framework of culture history in the Grand Canyon as understood in 1966. He identifies three research periods: (1) discovery and exploration, 1540 to 1900; (2) general investigation, 1900-1950; and (3) concentrated analysis, 1951-1964. Schwartz (p. 469) notes the presence of four distinct historic cultures (Paiute, Hopi, Navajo, and Havasupai) in an environment characterized by spectacular relief, topographic ruggedness, and major environmental contrasts provides the setting for "an intriguing series of cultural interrelationships."

In reviewing the first period, Schwartz notes (p. 471) that Albert Schroeder suggested that Escalante's reference to the "Ancamuchis" on the south bank of the river who sowed much corn refers to the Hopis rather than the Havasupai as suggested by Auerbach.

In reviewing the second period, Schwartz notes (p. 472) that Powell was the first observer to describe archaeological sites in the Grand Canyon. Schwartz points out these "... first speculations concerning archaeological remains in the Canyon related them to the Hopi and, consistent with the short chronology of the time, suggested that they were probably historic in age." Following Powell, the Stanton Survey and popular writers (e.g., G. W. James) also described archaeological sites in and around the Grand Canyon. By 1900, however, Schwartz opines that over 350 years of knowledge about the Grand Canyon "had led to only superficial awareness of its culture history."

Knowledge about archaeology and ethnography associated with the Grand Canyon greatly increased after 1900 (pp. 474-476). A second prehistoric culture in addition to the Anasazi, i.e., the Cohonina, was identified. Navajo use of the Grand Canyon as a place of refuge beginning in the 1860s was identified.

Schwartz (pp. 476-477) notes that there was a "growing awareness" of Hopi use of the Grand Canyon due to the work of the Coltons (1931), Titiev (1937), and Simmons (1942). He says, "From these accounts it became apparent that the Grand Canyon near the junction of the Colorado and Little Colorado rivers was an area sacred to the Hopi. In the Hopi belief system it was here, at death, that man would return to the underworld. Periodically, young Hopi men, accompanied by older members of the tribe, made the journey past the original entry into the underworld — the *sipapu* — and then traveled on to the salt deposits where they collected salt for ceremonial use and for increasing their fitness for the afterlife.

In his conclusion, Schwartz (p. 481) notes "Periodic pilgrimages of the Hopi to the canyon of the Little Colorado river and the Grand Canyon itself may represent symbolic recognition of the protection that their ancestors found, even it was for only a short period." In Schwartz's model of the temporal and spatial relations of cultures in the Grand Canyon region, the Hopis stem directly from the Anasazi (p. 481).

Schwartz, Douglas W.

n.d. *On the Edge of Splendor, Exploring Grand Canyon's Human Past.* Annual Bulletin of School of American Research, Santa Fe, New Mexico [issued in 1989].

In a diagram of the general relationship of Grand Canyon cultures (p. 14), Schwartz depicts the Hopi as being present from AD 1200 to the present. Prior to AD 1200, the diagram suggests the Hopi were part of a more generalized Anasazi culture that begins prior to AD 700 and which has earlier roots in the Archaic dating back to 2000 BC.

A photograph of the Hopi *Sipapuni* taken by Schwartz in 1961 (p. 64) shows water flowing out of the spring at the top of the travertine cone. In a brief personal description of his hike to the *Sipapuni* in 1961 Schwartz says (p.65), "It seemed completely out of place, this yellowish-brown dome of rock on the bank of the Little Colorado River, rimmed by sheer red cliffs. Yet there it was in front of me, the sacred sipapuni of the Hopis, the formation out of which their ancestors had ascended into this world." He adds (p. 66), "... there in front of us, was the origin place of a people — as sacred to the Hopis as Bethlehem to the Christians, Mecca to the Moslems, and Benares to Hindus." He concludes "Climbing to the top over its slightly loose, grainy surface, we found in the center of the dome the pool of bubbling yellowish water through which the ancestors of the Hopis had emerged into this world. The sanctity of the spot affected us all, and for much of the time we were there we spoke very little."

In a section entitled "The Canyon Anasazi and Hopi Religion" (pp. 67-73), Schwartz (p. 67) suggests that the Anasazi people who left the Grand Canyon "... moved east and became part of the ancestral line of the Hopi Indians, profoundly influencing the development of Hopi cosmology." He thinks that the variety seen in Hopi "myths" reflects the many different groups that migrated to the Hopi mesas. Schwartz writes (p. 69),

> Like many groups, the Canyon Anasazi probably mixed into early Hopi society and culture, contributing their share of rites and deities to Hopi religion. For historically, references to the Grand Canyon as a sacred place are woven throughout Hopi cosmology and ceremonial practices. The reconstruction of the religion of any prehistoric culture is difficult, at best, but suggestions of what impact the Grand Canyon Anasazi may have made on the Hopis can be found in four separate but related areas: the Hopi myth of emergence, their deity Maasaw, their journey to the earth's navel, and some of their customs associated with death.

With respect to the *Sipapuni*, Schwartz says (p. 70),

> The sipapuni out of which the Hopi emerged is a well-known, revered, and until recently, regularly visited place, a flat-topped, dome-shaped geological formation, twenty feet high and thirty feet in diameter. Deep within the Grand Canyon, it lies a few miles up the canyon of the Little

> Colorado River from its confluence with the Colorado River. In the center of the dome is a pool of yellow bubbling water, through which the Hopi emerged.

Schwartz (p. 70) describes Maasaw as "the sole inhabitant and owner of this world, and the 'head chief' of the Grand Canyon. Long before the Hopis arrived, he lived near the sipapuni within the canyon."

Schwartz (pp. 70-71) uses Don Talayesva's account of a salt expedition (Simmons 1942) to describe the role of this pilgrimage in the culmination of the Wuwuchim ceremony. He notes the connection between ceremonial activities at the *Sipapuni* and the origination of the rain that falls on Hopi fields.

In describing Hopi beliefs about death, Schwartz (p. 72) points out how Hopi people who die are welcomed by Maasaw in the Grand Canyon and taken to the *Sipapuni* to go into the underworld for another life. He notes,

> Just as Maasaw takes part in the death of individuals, so he will attend the future death and renewal of Hopi society. Present at the beginning of this world, the fourth, he said, "I'm the first." And from his home in the Grand Canyon, on the last day of existence, it will be Maasaw who oversees the travels of the Hopis to the next world: "I'm also going to be the last."

While Schwartz (pp. 72-73) thinks that the Grand Canyon clearly plays an important role in Hopi cosmology and mythology, he admits that from the present evidence it is not possible for anthropologists to determine whether the Anasazi-Hopis already had their ideas before they moved into the Grand Canyon, or if parts of the myths (e.g., emergence) were early elements in the Puebloan religion and the Canyon Anasazi only added location to the story.

Schwartz (p. 73) suggests the early religion of the Anasazi included neither Maasaw nor kachinas. In the late AD 1100s, he thinks Anasazi from many religions left their drought parched homes and jointed their Hopi relatives, bringing with them ideas relating directly to the Grand Canyon. These ceremonies were accepted and performed during the winter. In the 1300s and 1400s, a new group of ceremonies and spiritual figures came to Hopi from the south, i.e., the kachinas, and their ceremonies were practiced during the spring and summer.

Schwartz (p. 73) suggests that scholars may discover that Hopi references to the Grand Canyon are metaphors of the earlier life and experiences of the Canyon Anasazi.

Scientific American Supplement

1878 The Cañons of the Colorado, No. V. *Scientific American Supplement* 6(135):2139-2141.

This is one part of a series of newspaper articles compiled "... from the report of Prof. J. W. Powell, Geologist, in charge U. S. Geological and Geographical survey of the Territories" (p. 2139). It indicates the information disseminated to the public about the Grand Canyon in the late nineteenth century.

The article includes a statement that, "The country has some archælogical interest" and goes on to describe the ruins found by Powell's expedition, including cliff dwellings and room blocks (p. 2139). In describing one archaeological feature, the article notes, "From what we know of the people in the province of Tusayan, in northern Arizona, who doubtless are of the same race as the former inhabitants of these ruins, we conclude that this underground chamber was a "kiva," where their religious ceremonies were performed" (p. 2140). The article also describes the ruins found at the confluence of Bright Angel River with the Colorado River.

The suggestion is made that the Grand Canyon was occupied by Puebloan people who sought refuge from the Spaniards (p. 2140).

Seaman, P. David (editor)
1993 *Born a Chief, The Nineteenth Century Hopi Boyhood of Edmund Nequatewa; As Told to Alfred F. Whiting.* The University of Arizona Press, Tucson.

This autobiographical account of Edmund Nequatewa's childhood in Mishongnovi and Shipaulovi contains several references to the Grand Canyon or salt.

On page 9, Nequatewa describes how his mother had a stew bowl that "she got from the Walapai people who live near the Grand Canyon, and salt from the salt lake forty miles south of Zuni. Father had gone for it."

On pages 32 and 77 Nequatewa describes how abstinence from salt in food for four days is part of the *wuwutcim* ceremonies.

Secakuku, Ferrell

1993 The Hopi View of Wilderness. *Federal Archaeology Report* 6(3):9.

This brief statement is excerpted from Secakuku's remarks at the National Interagency Wilderness Conference held in Tucson, May 17-21, 1993.

With regard to wilderness and land management, Secakuku states that, "Hopis do not have a word for wilderness ... All land should be respected ... Our religion does not teach us to subdue the earth. Our religion teaches us to take care of the earth in a spiritual way as stewards of the land."

Secakuku describes the Hopi view of cultural resources by explaining,

> Hopis do not view cultural resources, such as ruins, as abandoned or as artifacts of the past. To a Hopi, these villages were left as is when the people were given a sign to move on. These homes, kives [sic], storehouses, and everything else that makes a community, were left exactly as they were because it is our belief the Hopi will someday return. Our people are still there. Today the Hopi designate these ruins as a symbol or their sovereign flag. Potsherds are left in abundance, usually broken into small pieces with the trademarks showing. These are the footprints of the occupants. Hopis believe that ruins should remain untouched because when anything is taken it breaks down the value of holding the village in place.
>
> Hopi prophecy recognizes these cultural resources as part of today's living culture. They indeed should be protected for the future of our people ...
>
> The Hopi way of measuring the value of cultural resources and other so-called artifacts is not in terms of money. Rather it is their importance for life today and their future destiny. The future of the Hopi is a great burden to them because we must live a life of spiritual meditation and humbleness in order to take this corrupt world, which will get worse, into the better world. Yes, we believe in the fifth world and our spiritual integrity must be strong to keep our ruined villages alive. Our houses, kives [sic], and our shrines at the ruined village perimeters must be kept warm and active. We rely on our spiritual ancestors who passed this way and are still there to receive the messages.

Sekaquaptewa, Emory

1972 Preserving the Good Things of Hopi Life. In *Plural Society in the Southwest*, edited by Edward H. Spicer and Raymond H. Thompson, pp. 239-260. Intebook, New York.

This article reviews traditional Hopi social organization and culture in the context of historical events, factionalism, land disputes with the Navajos, and Federal Indian policy.

Sekaquaptewa notes the importance of clan migrations in the autonomy of Hopi villages, observing that (p. 240), "Each village has determined the organization and functions of its social, political, and religious systems, according to its own interpretation of clan migration legends."

In discussing land use, Sekaquaptewa notes that some lands used by the Hopis lie outside their reservation. He says (pp. 242-243),

> Many ceremonial shrines, ruins, and other monuments that historic significance to one or more of the clans lie out of village-controlled lands, and some even lie outside of the Hopi Reservation. These places are considered as "belonging" to the group which has a historic claim to them, and these claims are renewed through rituals which commemorate the historic events which gave basis to the claim. Prayer feathers used in the rituals are deposited at these places as evidence of the claim. In some instances, the place names of these monuments or ruins are given to places nearer the village for a more convenient performance of commemorative events.

In a section entitled "Origins of Misunderstanding," Sekaquaptewa sketches the origins of the Hopi's mistrust and misunderstanding of Federal governance (pp. 245-247). In the 1880s the kikmongwis of First Mesa, Second Mesa, and Third Mesa, each in his own name, made formal pleas to Federal officials in Washington for assistance to stop Navajo depredations. Sekaquaptewa describes the difficulty of communicating using a combination of Spanish and English, even with the help of local non-Indian traders who could speak a little Hopi. As he observes (p. 246), "Because of the communication problem resulting from lack of fluency in a common language on both sides, there could not have been a true meeting of the minds."

From Sekaquaptewa's perspective (p. 246), "While the Hopi chiefs apparently submitted to the formal education in return for protection from Navajo encroachment, they did not agree to give up any claim to lands." The Federal government, however, implemented its commitment to protecting Hopi lands by establishing an Indian Reservation in 1882 by an Executive Order of President Chester Arthur. This did not solve the problem of Navajo encroachment from the Hopi's perspective. Sekaquaptewa explains (pp. 246-247),

> Moreover, the consequent results of the boundary definition, which may perhaps be found to have a rational basis in Anglo concepts, never coincided with the Hopi chiefs' understanding of their agreement with the government. First, the definition of the boundaries of the Executive Order Reservation of 1882 resulted in the extinguishment of Hopi title (unrecognized in Anglo law, but referred to as Indian title, the taking of which would later become compensable as a political matter) to all lands outside of that boundary—a result certainly not contemplated by the chiefs. Second, the government reserved the power to settle other Indians within the boundary at such times as it saw fit—a power which, if exercised, certainly required the more careful consideration of the situation that brought about the necessity for confinement in the first place. And third, the failure of the government to halt Navajo encroachment, but instead to permit it under the justification of administrative convenience (which later, under a strained court interpretation, was declared to be valid and official action to settle Navajos within the boundary) was a result which could be nothing more but insult to the agreement entered into by the Hopi chiefs!

Sekaquaptewa interprets the 1906 split at Oraibi as resulting from a design in deliberation (*diingavi*) that was symbolized and dramatized in part by Loloma's agreement with Federal officials regarding education of Hopi youth.

The Healing vs. Jones and 1934 Reservation land claims cases are discussed at the end of the article.

Sekaquaptewa concludes by opining that the essence of self-determination is for the Hopi people and Bureau of Indian Affairs to implement the traditional values and practices in administering the tribal constitution passed, in part, as a way of "preserving the good things of Hopi life" (p. 260).

Sigüenza y Góngora, Don Carlos de

1932 *An Account of the First Expedition of Don Diego De Vargas into New Mexico in 1692.* Irving Albert Leonard, translator. The Quivira Society, Los Angeles.

In this historical study of Diego De Vargas' reconquest of New Mexico in 1692, Sigüenza y Góngora discusses the motivations for the Captain-General's visit to the Hopi and the events of contact.

The author found in one of Vargas' letters written to the king, a statement suggesting that the Hopis had entered into a military alliance of sorts with their neighbors the Utes, Havasupais, and Navajos (p. 84).

Simmons, Leo W. (editor)

1942 *Sun Chief: The Autobiography of a Hopi Indian.* Published for the Institute of Human Relations by Yale University Press, New Haven, CT.

This extraordinary autobiography of Don Talayesva, edited by Leo Simmons, is a classic work in anthropology. Talayesva wrote about 8,000 pages longhand, which Simmons edited into a "selected and condensed narration, interwoven with additional information obtained by repeated interviewing" (p. 7). *Sun Chief* is therefore a "greatly abbreviated and often reorganized" autobiography, containing only about one-fifth of the data that were collected. Simmons describes the data left out of the book as "monotonous repetition of the daily details of life, legends, and additional dreams."

In prefatory remarks, Simmons notes the pervasiveness of travel in the Hopi economy (p. 11). He identifies salt as an example of a resource which the Hopi traditionally traveled to obtain (p. 12), observing, "Long and arduous journeys, with elaborate ritual and ceremony, were formerly made to procure salt."

Talayesva provides an in-depth description of his participation in a salt expedition to the Hopi Salt Mine in the Grand Canyon undertaken in 1912 (pp. 232-46). He was twenty-two years old at this time. Talayesva's narrative amply demonstrates the spiritual significance of the Grand Canyon region in Hopi religion.

The ritual preparations for Talayesva's salt expedition began during the Soyal ceremony when his father, a member of the Wuwchim, had made pahos and placed them on the shrine of the Twin War Gods. In Talayesva's words (p. 233), this "... qualified him for the trip to the Grand Canyon and the Home of our dear ones. The salt lies in dangerous territory, and long ago the War Twins had set up shrines and established rules to make the journey safe for the Hopi"

The following August, Talayesva's father announced the expedition from the housetops, exhorting "... that all who wished to go should patch up their moccasins, prepare salt sacks, and gather in their burros." Three burros were loaded with supplies and Talayesva and his father mounted two other burros and set out. They stopped at the Masau'u shrine which a corn-meal path was set heading west and prayer feathers were offered. As they headed towards Moenkopi, they looked back to see if others would join them but no one came.

Talayesva had originally planned only to accompany the expedition as far as Moenkopi, where he visited friends and attended a horse race with the Havasupais and Navajos. At Moenkopi, Talayesva was invited to go to all the way to the Hopi Salt Mine by Talasvuyauoma, the War Chief, who explained that no one seemed willing to join the expedition (p. 234). Talayesva accepted the invitation. The War Chief, Talayesva's father, and some men from Shipaulovi taught Talayesva how to make the prayer feathers necessary to collect the special yellow clay from the Grand Canyon that was used in making pahos. Each of the three Hopis going on the expedition wrapped their prayer

feathers in separate paper bags and ritually smoked, exchanging kinship terms. Talayesva was told that since he had made prayer feathers for the expedition, he had to practice sexual abstinence and not visit his girlfriend before leaving on the pilgrimage.

The next morning the expedition left Moenkopi (p. 234). Outside the village, the War Chief sprinkled a corn meal path and each member of the party stepped on the "road-marker" as the journey began. Prayer feathers were deposited at two sacred springs along the trail. About nine or ten miles from Moenkopi, the Hopis also made prayer offerings at shrine of the Mountain Sheep (p. 235). Traveling another mile, the party arrived at Tutuvehni.

In Talayesva's works, Tutuvehni was (p. 235),

> ... the shrine were Hopi salt gatherers carve their clan emblems on the rocks. Our ancestors had gathered salt fro many generations, and there were hundreds of clan emblems cut into the rock base of the shrine. Every traveler, on each successive trip, had carved another symbol to the left of his original one. My father had carved eleven sand dunes in the course of his life, and Talasvuyauoma had carved ten coyote heads. I selected a smooth surface near by and carved my Sun symbol, also tracing my initials on the emblem; but I kept this secret, fearing that my companions would to it as something modern. When I had finished, I placed the breath line of a prayer feather at the mouth of my Sun symbol, pounded it with a stone until it stuck, sprinkled corn meal upon the face of the emblem and prayed "My uncle, the Sun god, please notice that I have carved my clan emblem upon the stone. Direct our steps to the Salt Canyon, and watch over us until we return safely. Make our path smooth and renew our strength, so that our burden may be light." I prayed earnestly, realizing that we were entering the land of spirits and would have to cope with strange powers.

The party continued its journey, stopping to make offerings at a sacred spring and to play a ritual game of Hopi checkers at the shrine of the Twin War gods at the crest of a hill (p. 236). They stopped at the shrine of Salt Woman, a slightly elevated sandstone formation about two feet wide and six feet long. Each of the three Hopis had ritual intercourse with Salt Woman under a wedding blanket, naming one of their aunts as a partner. Prayer feathers and sacred corn meal were offered in a hole in the center of the shrine that resembled a vulva about two inches wide and six inches deep. When Talayesva asked the meaning of this he was told,

> When the Spider Woman, who owns the salt, was making a trail for the Hopi to Salt Canyon, she grew tired, stopped here, told her grandsons the War Twins to complete the trail to the canyon, and then turned herself into this stone so that she could guide the Hopi to salt. Whenever we have intercourse with her, we are doing it to increase our children and improve our health. This is not a "dirty trick," as the Christians have called it,

> neither is it the worship of a stone image, for we know the Salt Woman is a living goddess, and that intercourse with her means life.

In the next four or five miles of travel, Talayesva recognized the scenery, which he had seen on a "death journey" he experienced in 1907 while a student at the Sherman Institute in California [see pp. 120-128 for a description of this; also Titiev 1941]. He described things that would appear on the trail, convincing the other people in the party of the veracity of his death journey.

At sunset the party camped. As the Kele [initiate on a first journey], Talayesva prepared supper (p. 237). That evening, the two other men in the party recounted the story of Salt Woman and the War Twins and gave a history of Hopi ancestors journeying for salt. An earlier salt expedition was described as ending in disaster after one of the participants failed to obey all the ritual strictures. On the return of this expedition, the burros broke loose and scattered the precious load of salt. It was a difficult task to recover the burros and pick up the salt.

The next day the expedition continued through flat country with large cactus plants (p. 237). Talayesva continued to see the ruins and landscape he had experienced during his earlier death journey. When the party arrives at Salt Canyon, Talavesva remarks that the "House of the Dead" is located here. He recalls (pp. 237-38):

> ... when we looked west along the rim of Salt Canyon, it seemed that I could see houses with windows through which people threw their ashes into the canyon. Blue smoke seemed to rise over the canyon, and my father said that it was from the Houses of the Dead along the rocky rim. I felt self-conscious and uncomfortable, wondering whether our ancestors were watching us and making comments.

Upon arrival at the Salt Canyon, Talayesva hobbled the burros while the War Chief made dough of sweet corn meal kneaded into the size of baseballs. The saddles and equipment were hidden in the rocks and covered with canvas. Each of the Hopis took food, their prayer feathers, and one of the sweet corn dough balls (p. 238). They proceeded to the southwest edge of the mesa and came to a jagged rock which was a shrine of the War Gods. The War Chief explained to Talayesva that as the War Twins were making a trail to the salt, one of them became tired and changed himself into stone to mark the way. Prayers offerings were made at the War shrine prior to descending into Salt Trail Canyon.

The expedition made a descent down to a lower shelf in Salt Trail Canyon, where they followed a zigzag course (p. 238). A pinch of corn meal was made whenever a rock was dislodged. They passed a place called Spreading Buttocks where steps were cut into the rock. They came to a second shelf and momentarily lost their way. Talayesva chided the two men with him since they had made the trip many times before. He placed a small rock upon a stone to guide him on the way back but the War Chief warned him not to do that since only Kwan members and War Chiefs can safely set up trail markers (p. 239).

Four steps later Talayesva fell and injured his arm. His father admonished him that this was proof that he should obey all the rules.

They entered a gorge and came to a shelf where Talayesva was told to pay to attention to the landscape since he would lead the group on the climb out (p. 239). Only one of the three shelves at this point were passable. They continued and passed a broad cliff, the special home of the Reed Clan. An offering of prayer meal was made here. They next passed a rock with a petroglyph depicting an old-fashioned fur quilt pattern and prayer meal was again offered. They passed the home of the Mountain Sheep and the place where the Havasupai used to gather agave to make bread. They coated their faces with red paint and came to a gap the Hopis call the Nose Scraping Place. Talayesva described that the Hopi rule here is that each man stand astride this gap with his nose placed against a flat stone on a spot of red paint scraped off the noses of salt gatherers that had passed by before. The expedition came to a slab of rock leaning against an upright stone, on which were petroglyphs of chickens carved by the War Twins. Prayer feathers were offered here and affixed to the rock using sweet dough (p. 240).

The expedition descended to another shelf where they came to a cave below a huge yellow rock that is a shrine of Massau'u (p. 240). The War Chief climbed into the cave to make a prayer offering. Talayesva and his father continued around the corner while the War Chief conducted a ritual which included prophecy. The cave contained a grinding stone and if fresh food like green corn or melons were observed in the cave it was a bad omen while if old food was observed it was a good omen. The War Chief reported seeing four old corncobs and some very old corn meal on the grinding stone, which was a good omen.

The group next came to the house of the Coyemsie, or Mud Heads. Prayer feathers and corn meal were offered here in a cleft in the rock. They then made a final descent down a sandy slope to the Little Colorado River. Talayesva reports that the water there tasted salty. Prayer feathers were deposited here.

The expedition continued along the right bank of the Little Colorado River to the place of the blue salt. Here they deposited prayer feathers and climbed on to "a little hillock" which was the original kiva and the hole through which all mankind emerged. As Talayesva describes (p. 241),

> Beyond the ring of bushes we came to a central mound of yellowish earth and stepped to the north side to remove our moccasins before entering the sacred place. The War Chief took four prayer sticks and four feathers, one with a breath line upon it, and stepped with us upon the hillock to a flat area about ten feet in diameter. At the very center was the original *sipapu*, the opening leading to the underworld. There was some yellowish water about two feet down which served as a lid to the sipapu so that no ordinary human could see the marvels of the underworld. This may be the fountain of youth which white men have sought in vain. Some ignorant, foolhardy Whites had plunged two poles into the sacred sipapu and left them standing

> against the west wall. Those profane fellows had desecrated the sacred spot where our ancestors—and theirs—emerged from the underworld. It was a great disgrace.

Two sets of prayer offerings were made at the Sipapu and silent prayers were said for the Cloud People to accept the offerings and send rain. Talayesva (p. 241) explains the Sipapu was the "... main road that the "Six-Point-Cloud-People" travel when they emerge from the Sipapu to bring rain for the Hopi. They ascend into the air at this spot, look eastward, and go to the farms of the most worthy people."

Prayers were also offered and a yellow clay collected about fifteen feet to the southwest of the Sipapu (p. 241-242). Here is a hole that is connected to the kiva "like a draft funnel of a sweet-corn oven. This hole was filled with sand which was removed. As the Kele, Talayesva was instructed to reach into the hole and exchange prayer feathers for the yellow clay. First the two elders on the expedition told Talayesva told to take off his shirt; they said he really should be completely naked but since he had obeyed all the rules so well on the trip taking off his shirt would be sufficient. The two elders held onto Talayesva as he plunged his arm into the hole. Talayesva reports he "... could feel the presence of the spirits below, who accepted the feather and gave me clay." He exchanged feathers for clay until only poor clay was being obtained, a sign that enough clay had been collected on this trip.

The clay was placed on rocks to dry and the expedition hurried down the Little Colorado River to its junction with the Colorado River (p. 242). There they prayed and prayer feathers were deposited on the water so the waves would take them away. The Hopis dipped their hands in the water and threw water toward the Hopi villages four times to encourage the Cloud People to send them rain.

Talayesva reports the Hopis were tired and the War Chief wondered if this was because he had allowed Talayesva to collect the yellow clay at the Sipapu wearing pants (p. 242). The Hopis ate a hasty lunch and drank from the sacred river. They then proceeded three or four miles to a "precipitous ledge" overlooking the salt deposits.

The image of Pookonghoya, the elder War Twin, projected from the ledge at the place he had turned himself into stone to help the Hopis descend the steep cliff (pp. 242-243). Talayesva says that in former times the Hopis used ropes of rawhide that they looped over the War god's chest to lower themselves down the cliff. Talayesva's expedition threw down their blankets and their salt bags, and the War Chief fastened a rope to the stone image. All of the Hopis also fastened prayer feathers to the War God using sweet dough before making their descent down the rope. The two elders descended with some trepidation about the strenuous climb they would have to make back up with heavy loads of salt. Talayesva (p. 243) notes that "A few steps away there was an old ladder made out of timbers by Whites, but we dared not use it and break the old Hopi rules."

The Hopis took their blankets and prayer feathers to a cave that was partially filled with sand. The War Chief explained this was where the Kwan society members live after they die. The cave previously had two huge horns of salt hanging from the ceiling but the river had washed these horns away and fill the cave with sand. This was taken as sign foretelling the end of the Kwan society at Oraibi.

After depositing prayer feathers at the Kwan cave, the Hopis proceeded to a small fountain with a rock about three feet tall with a cupped top (pp. 243-244). Above this was an inverted cone of salt which dripped "salty medicine" into the cup. Talayesva noticed three pieces of "rock" in the cupped top which resembled mountain lions. He was told that whoever wishes to can take mold a piece of dough into the shape of an animal and place it in the medicine bowl. At the end of a year this will turn into a stone fetish as is used in ceremonies and by medicine men. Talayesva was told he could not take one of the mountain lion fetishes since he had not placed the dough in the medicine bowl. He decided against placing his own dough animal in the bowl "... since the journey was hard and dangerous, and I was not sure that I would return" (p. 244). Prayer offerings were placed in the medicine cup.

The last of the prayer feathers was then deposited to the clinging salt by the rock wall (p. 244). After another prayer, the Hopis collected salt. Talayesva was told it was better to collect the old salt chunks "grubbed up" out of the sand rather than the white shining salt hanging from above. Each Hopi collected about sixty pounds in one bag and a chunk for Salt Woman in a smaller bag. Talayesva remarked that he would like to stay longer and explore the area but the War Chief warned him not to say such things or the spirits may get him. Talayesva remarked his bag was not very heavy but his father warned him to stop that kind of talk or he would not be able to get it up.

The Hopis ascended the rope and hurried back to the confluence of the Colorado and Little Colorado Rivers where they camped (p. 244). Talayesva was warned that night not to look around too much or he would see an evil spirit. He was told of other salt gatherers who had seen spirits and then returned home to find that a relative had died in their absence.

The Hopis made an early start the next day, stopping at the Sipapu to pick up their dried yellow clay (pp. 244-245). Talayesva wanted to examine this sacred spot more carefully but the elders would not allow this. The War Chief led the procession, Talayesva was in the middle, and his father brought up the rear to protect them from evil spirits. When they passed Masau'u's shrine, the War Chief told Talayesva not to look back or he might see a sign that he or one of his relatives would die soon. Talayesva remembered being chased by a bloody Masau'u in his "death journey" so he strictly obeyed that rule.

On passing the Chicken shrine, Talayesva noted his prayer feather was still attached (p. 245). Talayesva forgot his father's instructions about which shelf to take and hiked along the upper ledge which led to a steep drop. He lowered his sack of salt down with a rope and then backtracked a quarter of a mile to get to the middle shelf. He had difficulty in catching up to the expedition. The War Chief teased Talayesva, saying that his missing

the trail gave the War Chief the right to sleep with Talayesva's wife. The Hopis were growing very tired but Talayesva's father told stories about his love-making with different women and this helped to lighten their load.

Upon reaching the top of Salt Canyon, Talayesva retrieved the burros (p. 245). After a feast of melons and piki, the Hopis loaded their burros and started home. They rode on to a camp and that night they reviewed all their experiences on the salt journey and Talayesva repeated the tradition of how the War Twins had established the salt expeditions.

The next day the Hopis came to Salt Woman and each man placed a large lump of salt in her vulva as an offering (p. 245). The expedition passed the gap and had lunch near the checkerboard of the War Twins (pp. 245-246). They arrived in Moenkopi about mid-afternoon. Talayesva reports that their relatives were rejoiced to see them. They ate a big meal and Talayesva's father gave a detailed account of the salt journey. He concluded (p. 246), "Now we have returned to you, and I think our reward will be rain." Everyone agreed.

Talayesva and his father returned to Oraibi the next day and by the time they reached Masau'u's shrine it was raining. They found the corn meal path they had set upon their departure, picked up the feathers, and turned the line eastward. After offering more corn meal, Talayesva reports (p. 246), "Then the Cloud People, who had trailed us from the sacred river, poured rain upon our crops—a true miracle."

Talayesva went to his wife's house where he learned that his wife's youngest brother had died three days earlier (p. 246). Talayesva reports this made him very sad. He went to his mother's house to rest. He carefully reviewed his salt journey but could find no fault with his actions. He reports, "I had no bad dreams, saw no evil spirits, and did not look back to seen if Masau'u followed us. I did carve my initials on my Sun emblem, but certainly that would not have caused the death of the little boy." When he returned to his wife's house he recounted his experiences on the salt journey to her family. The women put a ceremonial shawl upon the salt for a time and then divided it among the relatives. Talayesva reports he did not sleep with his wife for four days (p. 247).

As recounted by Talayesva, the salt expedition from Oraibi lasted a total of six days. It took one day to travel to Moenkopi. From Moenkopi, the expedition to the salt mine and back entailed a journey of four days with three camps. A final day was spent traveling back to Oraibi. Twenty-five prayer offerings where made at springs and shrines along the way.

Talayesva also includes an account of his journey to Zuni Lake for salt (252-255). Basically, Talayesva describes this expedition as traditional but not as ritually-imbued as the one to the Grand Canyon. He explains that, "We could eat modern food on the journey to Zuni Lake, for this is not as dangerous territory as Salt Canyon near the House of the Dead" (p. 253). However, other rituals remained the same, for instance, going

through the motions of copulation with the Salt Woman in order to demonstrate respect (p. 254).

In Appendix B, Simmons observes (p. 416), "The legends and myths are to the Hopi what Scripture, science, history, and literature are to us; and they are frequently related for both instruction and entertainment. Those which don heard as a boy help to explain much of his behavior as an adult." In the appendix (pp. 418-20), Simmons includes a much abbreviated summary of the Hopi origin account in which the role of the *sipapu* is described.

Simmons notes the Hopis commemorate their emergence from the underworld every year in the Wowochim ceremony, which Simmons states, "is performed by the Wowochim, Ahl, Tao, and Kwani fraternities and is believed to portray what happened in the underworld and how the Hopi managed to escape" (pp. 19-20).

Appendix B also contains an account that describes the establishment of the "Salt Journey" by the War Twins (pp. 433-435). The account begins with War Twins attending a dance at Blue Canyon, where the people are reluctant to invite them to eat because of their untidy appearance. When the War Twins are finally invited to eat, they offend their hosts by dipping their hands into the stew bowl after wiping their noses. When they weren't invited to eat again later in the day the War Twins grew angry and sent their grandmother, Spider Woman, to the west since they were going to take revenge on the people. The War Twins shot arrows into the village shrines causing the people to protest. As the crowd rushed them, the War Gods chewed a powerful medicine and spurted it over the people and their village, turning them into stone. The narrative continues,

> They followed their grandmother past what is now Moenkopi and set up a shrine at the spring, Pau'kuku. Then they proceeded westward to establish a new settlement at Salt Canyon and to prepare a trail for the good Hopi to follow in going for salt. They stopped at Tutuveni to carve their emblems, as Hopi have done ever since, and soon overtook their grandmother, who was weary. They urged her to hurry on, saying, "Our enemies may return to human forms and follow us." At Totolospi they let her go on while they stopped to play a game of checkers. When they overtook the grandmother again she was exhausted so that they had to half-drag her along. Finally when she complained that she could not take another step, they dug a narrow trench and told her to rest in it upon her back. They removed her dress, saying, "Now your private parts will show, and when the Hopi pass, every man will get into you. In this way we will trade with each other, because, on their return, the Hopi will leave salt for you." Then they chewed medicine and spurted it upon the Spider Woman, turning her into stone.
>
> The Twins hurried on the mouth of the canyon where the elder god said to his brother, "You stay here so that when the Hopi come for salt they will pray to you for rain as their reward for beating us at checkers." Thus the

younger War Twin was turned to stone, and his elder brother traveled past the place that spreads the buttocks, past the home assigned to the Reed Clan, the stone with the fur carvings, and the Chicken shrine. When he came to the home of Masau'u, the Head Chief of the Canyon, he very fortunately secured this powerful god's promise to help any Hopi who passed that way in the future. At the home of the Coyemsie he received a similar promise. Beside the Sipapu he said, "When salt gatherers come here they will deposit their offerings and pray." After leaving instructions for the proper procedure in removing the yellow clay (*pavisa*), he went to he edge of the cliff, picked a place to descend, and dropped to the ridge below. There he established the home of the Kwans, set up the stone basin for the medicine water, and walked along the ledge rubbing his fists against the walls of the canyon and turning everything he touched to salt. Finally, he climbed back on the shelf and turned himself into stone, the chest-shaped rock that has ever since assisted the Hopi in their descent to the salt.

Visits made to the to the House of the Dead by living people are described on pp. 435-436. Various people report different details but all of their stories are very similar. They describe passing people on the road westward who are on a long and tortuous journey since they had not lived a good life. Those who have lived a good life are permitted to take a broad, smooth trail patrolled by members of the Warrior society (Kwanitakas) who assist them. Often a good person is placed on his kilt and carried over the road as if flying. The righteous people pass a smoldering pit containing wicked people and then pass on to a large village of white houses where their departed relatives are living in peace and plenty. Those who were good hold the same ranks as positions as they had when alive. They don't eat solid food but its aroma or soul. The ancestors say they will send rain and good crops to the living. They advise the living to wrap up women in the white blanket (*ova*) and tied the big knotted belt around them when they die since when the skeletons move along the sky raindrops will fall from the belt fringes. The people in the House of the Dead tell the living visitors that they cannot stay and must return to the living to advise the people of Oraibi of what they have seen to assure them about life after death.

Sitgreaves, Captain Lorenzo

1962 *Report of an Expedition down the Zuni and the Colorado Rivers in 1851.* Rio Grand Press, Chicago. (Originally published: 1853, U. S. Serial Set, 32nd Cong., 2nd Sess., Sen. Ex Doc. no 59.)

Sitgreaves explored the Zuni, Little Colorado, and Colorado Rivers for the Corps of Topographical Engineers in 1851. In his journal he mentioned some interesting information about the landscape.

He wrote (p. 6): "The well marked trail we had hither-to followed brought us at length to the Little Colorado, which it crosses, continuing on south to the Salt River, a tributary of the Gila."

He also commented that (p. 8): "Near our camp, on the bank of the [Little Colorado] river, were the ruins of several stone houses, which the guide, Mr. Leroux, said resembled those of the Moqui Indians" (p. 8).

Near the gorge of the Little Colorado, Sitgreaves explained that (pp. 8-9):

> About a mile below the last camp the river falls over a succession of horizontal ledges of sandstone, forming a beautiful cascade of one hundred to one hundred and twenty feet in vertical height, and continues on its course through a canon of that depth, the general level of the banks remaining the same.
>
> Having been informed by my guide and other experienced trappers that this canon extends down the river to its junction with the Colorado, and the great canon through which the latter flows, I regarded the attempt to follow the river to its mouth as too hazardous, considering the conditions of the animals and the state of the supplies, and therefore, by the advice of the guide, turned off towards the mountains, with the purpose of striking the Colorado below the great canon, and then exploring it upward as far as might be found practicable.

Sekaquaptewa, Emory

1976 "Hopi Indian Ceremonies," in *Seeing with a Native Eye: Essays on Native American Religion,* ed. Walter Holden Capps. New York: Harper & Row.

This is a short essay in which Emory Sekaquaptewa discusses the process of acculturation of Indians into modern American society. He, from the start, states that these views are the product of his own experiences and background as a Hopi man. This is so significant to note because, for Sekaquaptewa, proper acculturation is a personal journey. One must take from his own culture, meaning and identity and then "strengthen it from within (p. 35)." From this foundation, the Indian can adjust to the "dominant society (p. 35)" keeping his own culture firmly intact. The individual and society can both benefit from this approach because each remains active and growing; a dialectical relationship is formed.

What he rejects is the stereotypical mold which both outsiders and Indians themselves, foster. This stagnation in identity happens from two directions. It occurs when non-Indians put scattered qualities together into a package and call it "Indian." It also happens when Indians "attempting to straighten out facts about Indians . . . [become] more concerned about that than about strengthening the cultural values that come from within the Indian culture (p. 41)." Allowing the journey to remain active, promises a more successful mediation between cultures.

As examples of cultural traditions which ground Hopi peoples' identities, Sekaquaptewa examines the role of *kachina* ceremonies in children's socialization (pp. 35-39). He also discusses Indians' attitudes toward animals and Nature. This is an area where Indian cultures are so often called on for examples but are usually misrepresented. The author hopes to clarify Indian peoples' attitudes through a discussion of their treatment of pets (pp. 42-43).

Sekaquaptewa, Helen

1969 *Me and Mine, the Life Story of Helen Sekaquaptewa as told to Louise Udall.* University of Arizona Press, Tucson.

This autobiography of Helen Sekaquaptewa describes Hopi life on Third Mesa during the period from 1898 to 1969.

In a section on trade, Sekaquaptewa notes (p. 56), "During the spring there was always traffic in commodities between tribes within a reasonable radius." She specifically mentions traders from Hualapai, as well as Utah, Zuni, Taos and other New Mexico pueblos, trading for Hopi textiles and produce (p. 57). She notes Hualapais traded buckskins to the Hopis (p. 59).

Sekaquaptewa describes Hopi burial customs (pp. 148-149), including placing a layer of cotton on the face of deceased.

In a section entitled "My Church, Sekaquaptewa provides an account of the Hopi origin and migration (pp. 224-228).

Smith, Melvin T.

1972 The Colorado River: Its History in the Lower Canyons Area. Ph.D. dissertation, Department of History, Brigham Young University, Provo, Utah.

Chapter 2, "Naming the Colorado River," reviews the various names applied to the Colorado River and some of its tributaries by Indian Tribes, Spanish explorers and priests, and American trappers and military expeditions. Coverage of Hopi history is superficial.

Smith, Watson

1952 *Kiva Mural Decorations at Awatovi and Kawaika-a, With a Survey of Other Wall Paintings in the Pueblo Southwest,* Papers of the Peabody Museum of American Archaeology and Ethnology, 37. Harvard University, Cambridge.

This work is part of an extensive study of archaeological sites in the vicinity of the Hopi Mesas. Although the information provided in this work concentrates primarily on the history and interpretation of murals contained in the ruins of Awatovi and Kawaika-a, Smith describes other elements of the excavated sites. In a summary of kiva attributes, Smith (p. 6) notes "Floor features of the kivas were fairly consistent." He adds (p. 6), "About half way between the firepit and the front wall was usually, but not always, a small aperture in the floor, sometimes covered with a wooden slab, and probably intended to symbolize the *sipapu* or the entrance to the Underworld."

At Kawaika-a three fish appear as design elements on the murals painted on the right wall of Room 4. They are depicted with white bodies with and scales indicated by black cross-hatching (see figure below). One fish the fins and tail are painted in red. One of the fish has what appears to be a dragon fly in its mouth.

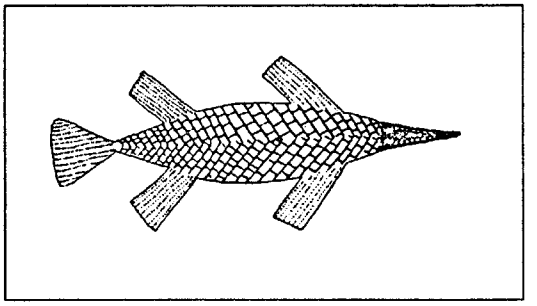


Figure. Fish depicted in mural at Kawaika-a (from Smith 1952, Figure 16).

Smith adds (p. 222),

> These fish are all drawn with extreme nicety, the scales, fins, tails, and long snouts being carefully and realistically shown. Their general character makes them look like pike or gar or some similar fish that might have lived in the Little Colorado River and so have been familiar to the inhabitants of Kaiwaika-a. It is said by local inhabitants that pike or gar have been taken from that river in modern times near Cameron, in that they do not have elongated snouts, and are without scales.

Smith (pp. 218, 222) adds, "Fish are said by the Hopi to be one of the pets of the Cloud kachina, Omauwû, but almost never are they depicted in ceremonial paraphernalia,

either by the Hopi or by other Pueblo groups." He notes there are some instances of fish in Pueblo pictography from the Gila river and a cliff near Sikyatki, and that they occur occasionally on ancient pottery such as Classic Mimbres Black-on-White. Three or four natural fish occur in the murals at the late prehistoric site of Kuaua on the Rio Grande in New Mexico. One instance of a fish on a Hopi kachina has been reported by Fewkes.

Mike Yeatts of the Hopi GCES project reports that Mike Yard, a fish biologist with the GCES in Flagstaff, thinks that the fish depicted at Kawaika-a resembles a Colorado Squawfish rather than a pike or gar, although it should be noted that Squawfish do not have such prominent scales (personal communication, 8/17/1994). This fish, now extinct in the lower Colorado River, was common before 1900 and grew as large as six feet with a weight of 80 to 100 pounds (Carothers and Brown 1991:97-99). There is no evidence that the Colorado Squawfish occurred in the Little Colorado River but it may have. However, it is almost certain it would not have been found above Grand Falls if it did travel up the Little Colorado River. If Yard's identification of the fish is correct, the depiction of a Colorado Squawfish at a prehistoric Hopi archaeological site is evidence that the Hopi's ancestors observed such a fish in the Grand Canyon or one of the tributaries of the Colorado River such as the San Juan River.

Spangler, Sharon

1986 *On Foot in the Grand Canyon, Hiking the Trails of the South Rim.* Pruett Publishing Company, Boulder, Colorado.

This hiking guide contains a description of the Tanner Trail (pp. 122-139). Spangler notes (p. 123) "The trail was originally an Anasazi route, used in more recent centuries by the Hopi and the Havasupai Indians." The trail is named after Seth Tanner, a trader who lived near what is now Cameron. He improved access to a mining claim in Palisades Creek known as the McCormick Mine, named for George McCormick who operated the mine for Tanner. Ben Beamer, another prospector, improved an "Anasazi track" from Palisades to the Little Colorado River. Beamer built a cabin on the south bank of the Little Colorado on top of a prehistoric ruin (p. 124).

Spangler (pp. 124-125) thinks its interesting "... to consider who did *not* use the Tanner Trail, for history might have been different if they had: the first white men to set eyes on the Grand Canyon." She opines that in 1540 the Hopi guides that led Cádenas to the South Rim somewhere between Moran Point and Desert View could have led the Spaniards to the river using the Tanner route. Spangler notes the Hopis also knew other routes, e.g., the ceremonial Salt Trail that led to the sacred salt leaching from the Tapeats Sandstone along the Colorado River. She suggests (p. 125),

> Most likely, the Indians wanted to keep the inner Canyon unvisited by outsiders, for the Grand Canyon is central to their religion. Their most sacred place was and is the Sipapu, a spring issuing from the center of a large travertine mound in the Little Colorado River, 4.7 miles up from its junction with the Colorado. The Sipapu symbolizes the entrance to the underworld, form which human beings and animals emerged and to which the dead return.
>
> The Hopis occasionally still make the ceremonial 100-mile trek from the reservation to the Salt Mines, and out of respect to them the park service has closed the Hopi Salt Mines to all visitation from the mouth of the Little Colorado down the Colorado to mile 62.5.

Spangler (p. 138) notes the Tanner Trail was used first by Indians who farmed the creek bottoms at Unkar and Nankoweap, "... then by their descendants who used it in pilgrimage to their religious shrines," and more recently by Anglos accessing mines.

Spangler quotes two Grand Canyon hikers about how difficult it is to always pay attention to features along the trails when you have to concentrate on watching your footing (p. 139). Harvey Butchart is quoted as saying, "There have been times when I was watching my footing so constantly that I walked right by prime items. I once walked from the mouth of the Little Colorado to the Hopi's Salt Trail Canyon, mostly on the south side, without noticing the Sipapu across the river." Similarly, Jim Ohlman said, "I have pulled this very same stunt twice in one trip, but I have seen the Sipapu twice since then, and it is sort of like missing a red Cadillac parked in your living room!"

Spier, Leslie

1928 Havasupai Ethnography. *Anthropological Papers of the American Museum of Natural History*, vol. 24, part 3. American Museum of Natural History, New York.

In this study of the Havasupai, Spier includes information about the Hopi. He mentions their involvement with the Havasupais as trading partners (pp. 244-246). He also discusses the casual/social element to trading visits (pp. 246-248).

Spier claims that the Havasupais and Hopis were friendly. He also states that the few weapons which the Havasupais owned, they generally obtained from the Hopis (pp. 249-250).

Stephen, Alexander McGregor

n.d. A Genesis Myth of the Tusayan (Moki). Ms. 1310, National Anthropological Archives, Smithsonian Institution.

Although this manuscript is undated, a cover letter by Cosmos Mindeleff transmitting this to the Director of the Bureau of American Ethnology is dated May 2, 1889. The account was told by Kotí-ve (Kótc-ve) the oldest member of the Tcu-in-nýn-mu, the Snake people. This manuscript is sixteen pages long and therefore represents a very abridged version of the origin account translated into English.

The account begins with a description of the quarreling and problems that led to the emergence of the people from the underworld. Two sisters were sent ahead and they passed up to the second house. There was water everywhere. "Then the twins Pe-koñ-ho-ya, and Ba-liñ-a ho-ya (the Echo-Youth), sons of Ko-kyañ wuh-ti (Spider Woman), came to the sisters and led them towards San Francisco Mountains. They cut gashes in the earth with their great knives, and the water flowed away through these channels" (p. 3). This world was still not satisfactory and the sisters continued to pass to upper houses until they reached the fourth level. The people in the underworld eventually followed the sisters to the fourth level using the Bá-ka-bi (phragmites communis) to pass to the higher levels (pp. 3-8).

After the emergence, rude people (Navajos, Apaches, Paiutes) snatch gifts from the Hopituh and the white men go to the east (pp. 8-9).

When the Snake people were living at Navajo Mountain, Tí-yo (the Youth) sat by the river and wondered where it went (pp. 10-14). His people consented to a journey for him to find out its destination. They got him a hollowed out cottonwood log and lined it with bark and grass, pitched in with gum, leaving an opening in one end. Pahos were made and Tí-yo pushed on and floated down the river. During a long journey Tí-yo has many experiences and marries a Snake woman. He returns to his village with his bride and ritual paraphernalia.

The Snake people eventually leave Navajo Mountain and migrate towards the Hopi Mesas—"all of the ruins between here and Navajo Mountain mark the places where our people lived." They settle at Wip-ho before Masau-wû instructs them to move further down the valley.

The account ends with the statement, "All the snake people did not come to Walpi, some went to Micoñinovi, and some to Oraibi.

Stephen, A. M.

1891 "Wiki tells his Tradition, owing to his deafness, Wikyatiwa and Masiumtüwa assist him. Ms. in folder "n.d. Stephen, A. M. (and others?)," Fewkes Collection No. 4408, 2-5, National Anthropological Archives, Smithsonian Institution.

This nineteen page handwritten manuscript is dated Nov. 25, 1891. It provides an account of the Hopi origin and migration from the perspective of First Mesa. The manuscript begins with the statement (p. 1),

> Far down in the lowest deep of Pí-sis-bai-yu (the far below river, the Colorado) at the place where we used to gather salt, is the Sí-pa-püh, the orifice where we emerged from the Underworld. The Zuni, the Kohonino, the Pah-Ute, the Whiteman, all people came up from the below at that place. Some of our people traveled to the north but the cold drove them back and after many days they returned to this land.

In a footnote, Stephen adds that salt referred to was gathered from "... a saline deposit in the Grand Cañon, a short distance West from where the Colorado Chiquito debouches into the its greater namesake."

The narrative continues (p. 1),

> The mothers carrying their children on their backs went out to gather seeds for food and they plucked the prickly pear and gave to the children to still their cries, and these have ever since been called Ü'-ce nyû-mûh, the Hopi prickly pear people.
>
> Mourning-dove flew overhead spying out the springs and calling to come and those who followed him, and built their houses at the springs he found, are still called after him the Hü-wi-nyû-mûh
>
> But all that region belonged to Puma, Antelope, Deer and the other Horn people, and Tá-ho-a (puma) led my people, the Tá-ha-nyu-muh, to To-kon-abi, the Sand people, and the Horn people, also dwell in the same region.

A long version of Tí-yo's travel from Tokonavi down the Colorado River is recited (pp. 2-15). The account begins (p. 2),

> The Ki-mûñ-wi (Village Chief) of the Tá-ha-nyû-mûh had two sons and two daughters and his eldest son, known only as Tí-yo (the youth), seemed always melancholy and thoughtful and was wont to haunt the edge of the cliffs. All day he would sit gazing down in the deep gorge and wondering when the everflowing water went, where did it finally find rest. He often discussed this with his father, saying, "It must flow down some great pit into the underworld, for after all these years the gorge below never fills up,

> none of the water ever flows back again." His father would only say "Maybe it goes so far away that many old men's lives would be too short for its return." Tí-yo said, "I am constrained to go and solve this mystery, and I can rest no more "till I make the venture." His family beseeched him with tears to forgo his project, but nothing could shake his determination, and he won them to give their sorrowful consent.

The account continues wherein Tí-yo uses a vessel made from cottonwood log hollowed out with a stone axe and live ember. Tí-yo's mothers and sister prepare food and his father prepares pahos for his journey, including the "great paho" from his elbow to his thumb, to give to Spider Woman (p. 3-4). Pahos were made for: Ko'kyañ-wug-ti (Spider Woman); Hí-ca-na-vai-ya [the Ancient of the Six (worlds); the six cardinal points]; Hü-zrü-iñ-wug-ti [Woman of the Hard (substances); the genius of all hard ornaments, or wealth, or Turquoise, Coral, & Shell]. Pahos were also made for Tá-wa (the Sun); Mü-i-yiñ-wuh (God of the Underworld who makes all the germs of life); Kwá-pü-hü (down from the eagles thigh). Tí-yo's father said Spider Woman would show him how to use all the pahos and other sacred material he took, e.g., prayer offering meal.

Tí-yo undertakes his perilous journey and the recounting of his ride down the river accurately describes a river trip. As Stephen writes (p. 4),

> His father then closed the end and gave the box a push with his foot, and it floated away bobbing up and down.
>
> In one of its ends was a small circular aperture through which he thrust his wand and pushed away from the rocks encountered; the spray also splashed through it and this he caught in his basin when he wished to drink or to mix his kwip-dosi, and he was also provided with a plug to close the hole when he neared the roaring waters. He floated over smooth courses and swift rushing torrents, plunged down many cataracts, and spun through many wild whirlpools where black rocks protrude their heads like angry bears, and this for many days, who knows how long?

The rest of the account (pp. 5-15) is similar in most details to other published versions of Tí-yo's story, and relates how Tí-yo marries a Snake woman, brings home ritual paraphernalia, and eventually precipitates a migration away from Tokonavi after the Snake children that are born bite the other children causing them to die. During the migration that ensued, the Puma, Sand, and Horn people started together but split off and did not rejoin others until they got to the Hopi Mesas (p. 15).

One group settled at Wu'-ko-ki, about 50 miles west from Walpi. While at this place, one of the Tca-ma'-hi-a (the name of the old celts on the Snake and Antelope altars said to have been brought from the underworld by Tí-yo) traveled to Sotcp-tu'kwi (near Santa Fe), stopping by Acoma, called Á-ko-kyabi (place of the ladle) because of the water holes on the summit (pp. 15-16). He found the people he was looking for there and remained there forever.

After leaving Wu'-ko-ki the Hopi group halted near Middle Mesa where they encountered Ma-sau-wûh (p. 16), "The deity who presides over the immediate surface of the earth, and over all events and changes in man's existence, and finally causes death; he also made the first fire and brought it to man." The dove leading the migrating group followed Ma-sau-wûh's tracks "around a great circle encompassing Nü-vát-ikyau-obi (Place of Snow Peaks, San Francisco Mountains) on the west; Pa-lá-bai-yu (Red River, Colorado Chiquito) on the South; Wu-ká-bai-yu (Great river, Rio Grande) on the east; and Hóp-ka-yi-ba-bai-yu (from Hó-pada, the North East, the San Juan river) on the North (p. 17).

The group settles at Walpi, and encounters Ma-sau-wûh again. Ma-sau-wûh says (p. 17), "I also am large of heart, all this land is mine, and all that lies within the limits of my footprints is yours, for you have won it because you met me and were not afraid. My house is there (pointing to a rocky spot close to the west side of the mesa) and there you must place the paho."

The narrative ends with the statement (p. 17), "'The uncle of my uncle spoke with one tongue' concluded the narrator, 'and this is the story he told.'"

The last two pages of the manuscript is a list of clans titled "Snake Group of Gentes of which Wiki is Chief."

Stephen, A. M.

1891 Letter to Jesse Walter Fewkes dated March 12, 1894. Ms. No. 4408, 2-5, in the Fewkes Collection, National Anthropological Archives, Smithsonian Institution.

This letter containing field notes also contains some material dated March 13.

With respect to the place of emergence Stephen says (p. 3),

> From sundry authorities: the Hopi, Kawáika, Pahána, etc. etc. came up together near the great water far in the Southwest — the Patki left the Hopi soon afterward + went to Palatkwabi.
>
> The Tówa, Komántci, and Kái-o-wa came up together at the Sipapü near the great water far in the north-east - and upon the same day as the Hopi + others emerged from the Sipapü in the South-west.
>
> The Kóhonina and the Siá-tü came up together at the Sepapü in the Salt Place in Grand Cañon.

With respect to Zuni, Stephen states (p. 4),

> Tó-tci came over the other day from Zuni on a visit - and was in last night for a short talk - he is wonderfully full of affairs of state when he comes over, and it is difficult to get him to sit still and talk. However, I asked him about the Zuni Sipapü. He disclaims having any exact knowledge of Zuni ceremonial or religious lore - but he says - he has always considered that the Zuni regarded the Salt Place in Grand Cañon as being the locality of their Sipapü where they emerged (nyüña) to this world surface. He never heard that the Zuni hold that the dead changed into turtles - but, he says, the Zuni, like the Hopi, regard the turtle as very sacred. As I understand it, he says, the breath body of the dead Zuni goes to Kóc-la-wa-lai-ye (a sacred place near St. Johns, also a sacred place of the Hopi + called by them Wé-ni-ma) where it changes into a Kachina, any Kachina, for the All-Kacina(s) (Co-yó-him) live there. After this change the body goes on to Sipapü -same as the Hopi. There are lagoons near Wé-ni-ma in which turtle are plentiful.

Stephen notes that the Hopi and Zuni both refer to Kolthuwala:wa/Wenima as the place of the Shalako/Cálako (p. 4).

Stephen, A. M.

1891 Memo dated December 6, 1891. Ms. No. 4408, 2-5, Folder 1891, Fewkes Collection, National Anthropological Archives, Smithsonian Institution.

This memo includes the following passage pertinent to the Siapupu and emergence (p. 1),

> I intended to have added an exegetic note to Wiki's incidental mention of a Sipahpüh far in the N. E. although he begins his tradition by stating that in the Grand Cañon is the Sipapuh through which all mankind ascended. Aside from this being a typical example of the discrepancies inherent in all primitive tradition it also agrees with the current conception of the Hopituh that certain gentes - or clan groups - emerged from the below at different localities. To them it is also consistent enough with their theory of the continuity of Müiyiñwuh's labours, and with their scheme of existing channels of communicating within through the Sipapuh in the different kivas, and at other sacred places.

Stephen, A. M.

1894 Letter to Jesse Walter Fewkes dated January 11, 1894. Ms. No. 4408, 2-5, Folder 1894, Fewkes Collection, National Anthropological Archives, Smithsonian Institution.

This letter discusses a number of different items, including the troubles that arose from a government official using Navajo policemen used to force children at Oraibi to go to school. Stephen writes (pp. 1-2), "What a foolish thing for this Goodman to send Navajo to demand children —."

On pages 5-8 of the letter, Stephen describes Hopi customs about death, "At last I have got the dead Hopi! and the mask connection is very apparent! This memo you will see agrees in the main with the mortuary scheme as told me by Wiki many years ago ... " Stephen then describes in detail the mortuary customs, including placing raw cotton over the face of the corpse to signify white clouds. Stephen writes, "Why the cloud signs, I asked — They said, 'So that when he comes up, in the below, he will tell the cloud deities to send rain to the Hopi!'"

Stephen describes the journey to the underworld people make after they die on pages 7-9. He says,

> After a man dies — his breath-body passes to the Below (I think on the straight-road described by the sun when he passes through the underworld) but by that as it may the B.B. goes to the below on a straight road ... [see figure below for diagram inserted in letter at this point] ... At the fork of the road sits To-ko'-na'-ka ... a Kwa'-Kwan-ti Chief ... when the B.B. comes to the place where the chief sits, the Chief looks him over — and if satisfied he says to B. B. üm pac-lóóa-ai = you are a good (man) go on — and B. B. passes along the road and goes down the Sipapü in the far West — the early Sipapü — the one up which all mankind came. He goes back to the place because from — the underworld — the place of Mürijiñwû and O'mauwû.
>
> Another B.B. comes to the forks of the road — and the Chief says "You are bad" — and he takes him up the crooked road to the place of the first fire pit where sits another chief — also called Toko'naka. + the first chief returns to his place at the forks of the road.
>
> The fire pit is very large and is full of blazing wood — the Chief flings the bad B.B. in the fire pit and after it has burned (for a time) it emerges (Kü'yi-va). Perhaps this B.B. was only a "little bad" — if so after emerging the Chief will say "You are good now" — and sends, or takes, him back to the forks + the other Chief being satisfied, the B.B. purified, passes on to the Sipapü.

If on emerging from the first fire pit, the chief is still dissatisfied with B.B. he takes it to 2d firepit and casts it in. If on emerging from there, the Chief is satisfied — then he dismisses B.B.; but this B.B. can never go to the Sipapü, because it is immediately metamorphosed into the Ho-ho-ya-üh!.

All of those beetles [?] we now see in the valleys + among the mesas were once evil Hopitü! If on coming out of 2d fire pit — B.B. is still considered bad by the chief, he takes it to the 3d fire pit + there flings it in — if upon emerging from that pit the chief thinks there is no evil left in B.B. it is metamorphosed into any one of several species of ants! All of which ants that we now see were once evil Hopi!

If upon emerging from the 3d pit the B.B. is still deemed bad by the Chief, he takes it to the fourth pit, where he casts it in and it is utterly consumed — its only residue being black soot upon the side of the fire pit. I have not yet fathomed the purpose of the pa-tüb'ha.

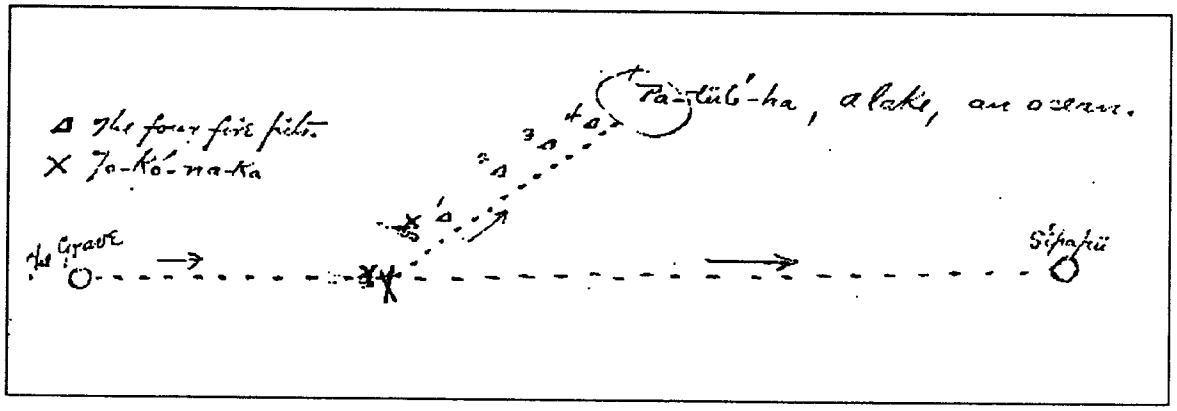


Figure: Diagram from page 7 of Stephen's letter of January 11, 1894.

With respect to turtles, Stephen (p. 9) writes,

You ask why the Hopi bring no live turtles to the Mesa — because — they find them at the Little Colorado and other distant streams." Stephen notes when the Hopis collect turtles they only bring back the shell. The flesh of the turtle is "cast back gently in the river praying that another 'hard skin' may speedily grow in the place of the one he has taken — + also prays for rain.

Stephen, A. M.

1898 Pigments in Ceremonials of the Hopi. In *International Folk-lore Congress of the World's Columbian Exposition,* pp. 260-265.

This brief article describes the preparation and use of some of "the curious pigments with which the Hopi ceremonial artist makes up his palette" (p. 265). These pigments are used to paint *pahos,* kachina masks, and other ceremonial objects.

Stephen (pp. 261-262) names the major directions and their emblematic colors, noting that the directions are oriented more to points of sunrise and sunset during the summer and winter solstice horizon than cardinal points.

Name	*Direction*	*Color*
Kwi-ni-wi	sunset at summer solstice	yellow
Té-vyüñ-a	sunset at winter solstice	blue
Tá-tyük-a	sunrise at winter solstice	red
Hó-po-ko	sunrise at summer solstice	white
O-mi	above (zenith)	black
At-kya-mi	below (nadir)	all colors

In describing the pigments used to create the colors associated with directions, Stephen makes several observations about pigments obtained from the Grand Canyon.

On p. 264, he notes, "... there is a red ochre, called cü'-ta, in constant use, and to obtain this ochre they go about 120 miles west, to the Kohonini country, close to the Grand Cañon of the Colorado, and in that same region they also gather the fragments of copper ore for preparing their blue."

On p. 265, Stephen states, "The pa'-ho of the Warrior Society are painted with cü'-ta ochre, because that is the warrior's color; he rubs cü'-ta over his body, blackens his face with charcoal, and sprinkles it with powered specular iron, because this is the aspect of the twin war-gods."

The blue pigment is called "Ca-kwa-pi-ki" (p. 263). It is prepared by processing Pinyon gum with boiling water to make a white pliable mass which is then tinted with a concoction of blue and green copper carbonate fragments mixed with water. The tinted gum is further processed with boiling water to darken the color. The water is eventually poured off, leaving a cake of pigment that weighs about eight ounces. Ca-kwa-pi-ki is used to paint sacred kachina masks (p. 265).

Stephen, Alexander M.
1929 Hopi Tales. The Journal of American Folk-Lore 42:1-72.

This collection of twenty-eight "folk tales" contains five accounts of the Hopi emergence. The accounts were narrated by different people, at different times, and they are discussed in response to different questions in the context of traditional ceremonial practice.

In a preface to the collection the editor, Elsie Clews Parsons, notes that these are the original, unexpurgated accounts collected by Stephen. Parsons (p. 2) states earlier publication of these accounts by Mindeleff and Fewkes "attempted to give them historical verisimilitude by omitting features that could not but be taken as legend and by emphasizing topographical and archaeological description." Parsons (p. 2) asserts that "Like all Pueblo peoples the Hopi have no historic sense in our meaning." She thinks her presentation of these accounts as folk tales provides a "corrective to the misinterpretative theory of migration by clan that has persisted in Pueblo ethnography for many years" (p. 3).

Tale One was told by We'he of the Kachina Clan of Tewa. Tale Three was told by Hoñi of the Cactus maternal family of the Snake Clan. No storyteller is named for the second and fourth accounts but Stephen mentions the fourth account was told at Sichomovi. Finally, Tale Nineteen is related by Pauwatiwa of the Reed Clan during a war ceremony held in December.

The narrators agree that the emergence occurred from the underworld, or third world, to this upper world, or fourth world. Most also mention that strife and foolish behavior had taken root in the underworld. The specific reason for leaving, however, is not to resolve this unruly situation but to escape the floods "bubbling" up in the third world. All of the accounts mention the sipapu as the place of emergence with variations on the exact course of events of who planted the reed which carried the people through the sipapu, what role the birds played, and other details. Numerous times, the location of the sipapu is characterized by the presence of water. We'he describes the place as being "all water" (p. 6). He also reports that the water took on the shape of a river flowing between canyons when the Twin War Gods used their "resilient lightening, shot in every direction and made cañons (*tüb' ka*) and through these the water flowed away" (p. 6). In Hoñi's tale, the storyteller describes the place of the sipapu as being next to water which "is always in commotion" (p. 7). Other descriptions, similarly, call to mind an environment around the sipapu very much like the Little Colorado River gorge.

The third account begins (p. 7),

> At the sipapü came up Pahano (White people), Hopi, Yota, Yochemu, Tashabu, (Navajo, their old name, Yotahuni) and Payutsi. A'takyûka, the west, direction of the below, was where people first came up, far in the west. There are four great waters (*patüpha*) separated by sand, and on the

> land, on this side of the fourth great water, and close beside it, is the place of the sipapü; there the water is always in commotion.

The collection of tales also includes four versions of the story of Tiyo who traveled through the Grand Canyon and discovered the Snake People from whom the Snake Clan evolved (pp. 35-50.

Pages 50-51 describe how the Twins drained the land, forming a large cañon, and then created vegetation to provide food for people to eat.

Tale 24 is titled "The Animals Carry Salt" (pp. 63-64). In this account Toho'ash was carrying a bag of salt that grew heavier as he traveled. Toho'ash enlists the aid of number of animals to help him carry the salt to his destination, including Antelope, Deer, Bear, Wild cat, and Lion. The account ends with the statement "Toho'ash then said he feared his uncle would be angry with him and chastise him for his delay and his misfortune in spilling the salt, but Lion said to him, 'Never fear, I will always guard the salt and protect you.'" Parsons, the editor, suggests Toho'ash may be a corruption of the Tewa-Jemez reference to the war gods, Towahe'sh.

Stephens, Alexander M. Parsons,

1936 *Hopi Journal of Alexander M. Stephen*, edited by Elsie Clews Parsons. New York: Columbia University Press.

The journals of Alexander Stephen provide basic documentation of Hopi lifeways during the late nineteenth century, especially the years from 1891-1894.

The following annotation summarizes the information Stephen provides about the Hopi use of salt.

Some Hopi rituals include fasts in which religious leaders abstain from salt (pp. 36, 272, 290, 776, 804, 811, 850). The girl's adolescence ceremony entails a period of abstinence from salt (p. 140-141). The Powa'mû ceremony has a period during which children must not eat salt for four days (pp. 198, 202).

Salt was exchanged in a "mart" in the dance court in February (p. 245-246). In one exchange Stephan noticed a woman leaving "... a basin of beans and a handful of salt in a rag in the middle of the dance court," and then proceeding to a friend's house after telling someone what she wanted to in exchange. Jerked mutton and baking powder were laid on her tray in her absence.

In June, an offering of food, prayer feathers, and tobacco were offered in a crevice in the cliff west of a village. Stephen (p. 473) states, "This is the food offering to the long ago and the far away, to the si'papü in the Colorado Grand Cañon, near the salt deposits."

Stephens (p. 497) describes the creation of prayer sticks at First Mesa in July using a yellow pigment. A Hopi man named In'tiwa told Stephen this pigment waws collected at a spring that bubbles perpetually in "a cavernous recess, which he calls kiva, in the bottom of the Grand Cañon near the salt deposit and Zuni si'papü."

On October 19, 1887, Stephan (p. 994) wrote at Shungopavi, "I was wakened this morning, long before daylight, by our host's wife grinding meal. A feast is in course of preparation in the village to welcome the return of the salt bringers from the salt lakes south of Zuñi. They are expected in today."

Stephens (p. 849) notes,

> Hopi, Pahano, Kawai'ka, etc. came up together at the si'papü in the far west near the great water ... To'wa (Tewa), Koma'nchi and Kai'owa, came up together at the si'papü in the far east, near the great water, and upon the same day as the Hopi and others came up in the si'papü in the far west. Siotü (Zuni) and Ko'honino (Havasupai) came up together at Üüñtupkabi near the salt deposit in the Grand Cañon.

Several places pertinent to Hopi use of the Grand Canyon are referenced in a list of "Place Names and References."

For the Colorado Grand Canyon, Pi'sisvaiyu, it is noted that the of the Emergence is loc ated here near the salt deposits (p. 1155). Offerings for this place are made in the cliffs of First Mesa. Pigment is collected from a bubbling spring.

Under the entry for Cataract Canyon (p. 1154), it is noted that a yellow pigment is collected from the cañon east of here. Grass, wood, and clay are also collected here.

Üüñtupkabi, near the salt deposit in the Grand Canyon is the place of emergence for the Zuni and Havasupai (p. 1167).

Stephen, Alexander MacGregor
1940 Hopi Indians of Arizona. *Southwest Museum Leaflets* 14. Southwest Museum, Los Angeles.

This article was in the possession of Dr. George Bird Grinnell at the time of his death. It is estimated to have been written in 1890. The article also appeared as a series of excerpts in *Masterkey.*

The editor adds a footnote (p. 1) explaining that Stephen "... employs the term "Moki," which is a corruption of the Zuñi name *A'mukwe*, which as reference to death, for which reason the Hopi object to its use. On this account the term *Hopi* (contracted from *Hópituh Shinumu*) is now invariably applied ..."

In discussing the historical background to the Snake Dance, Stephen notes (p. 2), "Many years ago the fathers came up out of the west. Turtle-dove led them to the Colorado river, and then they returned and brought the others. Close to Navajo Mountain (at the junction of the San Juan and Colorado rivers) was this place."

Stephen provides a version of the account of *Ti-yo's* journey through the Grand Canyon (pp. 2-8).

Stoffle, Richard W. and Michael J. Evans

1990 Holistic Conservation and Cultural Triage: American Indian Perspectives on Cultural Resources. *Human Organization* 49(2):91-99.

The thesis of this article is that "... the process of cultural resource assessment, conceived in Western epistemology and law, forces American Indian people to shift from a traditional resource position, termed here 'holistic conservation' to one of resource prioritization, termed here 'cultural triage'" (p. 99).

American Indian concepts of holistic conservation entail perceiving cultural resources as elements of a single whole. As a result of supernatural causes, Indian people think of themselves as a functional and essential part of the natural elements in their traditionally occupied lands (p. 92). Some scholars (e.g., Vecsey) use the term "environmental religions" to characterize this relationship. Stoffle and Evans suggest that the formal rhetoric of statements articulating holistic conservation have the simple message, i.e., "this land is ours, leave it alone."

Stoffle and Evans identify a "holistic conservation-triage dilemma" facing Indians who become involved in resource assessments (pp. 94-95). At the same time that the land is sacred, recommendations about specific tracts of land that will be impacted have to be developed. Stoffle and Evans (p. 95) suggest this dilemma can be resolved by involving the legitimate representatives of Indian tribes who understand how to relate to cultural resources to "they can achieve maximum protection in the face of a proposed development project." Cultural triage is defined as (p. 95)

> ... a forced choice situation in which an ethnic group is faced with the decision to rank in importance cultural resources that could be impacted by a proposed development project. Through this ranking the probability of certain cultural resources being protected is increased. On the other hand, it is understood that by selecting some cultural resources for special status, it relegates other to less-than-special status. Those defined as less-than-special, then, are placed at greater risk from the proposed project.

Stoffle and Evans note that there is a longstanding adversarial relationship between Indians and non-Indians regarding resources on traditional lands. Indians need to decide when to litigate these issues and when to mitigate them. For scholars, they advise (p. 98),

> Given a milieu that is apparently becoming less willing to halt projects because of impacts to American Indian religious practices, it is the professional responsibility of the applied social scientist to design a study methodology that permits the expression of cultural triage as well as holistic conservation responses. When Indian people ask how to affect project decisions, the social scientist should advise them as to the probabilities that holistic conservation or cultural triage will serve their cultural resource goals. Holistic conservation is strengthened, no compromised, by cultural triage.

Sullivan, John H.

1881 *Moquis Pueblo Indian Agency, Arizona.* 47 Cong., 1 Sess., House Exec. Doc. 1, part 5, v. 2, Serial Set #2018, pp. 61-63.

In 1881, Indian agent John H. Sullivan arrived at the Moquis Indian Agency and took his position as the new agent in charge of Hopi affairs. In this annual report to the Secretary of Indian Affairs, Sullivan wrote that when he arrived at the agency, he found only an "acting agent," probably denoting that leadership at the agency was slack (p. 61). Sullivan suggested that the agency be moved closer to the Hopi Mesas to increase its effectiveness (p. 62).

Sullivan reported that a trail linked Hopis to the Little Colorado River near Winslow. He stated that to obtain items for constructing a shelter, people traveled to "Sunset, 70 miles distant by Indian trail" (p. 62).

Swanton, John R.

1910 Salt. In *Handbook of the American Indians North of Mexico,* Part 2, edited by Frederick Webb Hodge, pp. 418-421. Smithsonian Institution, Bureau of American Ethnology, Bulletin 30. Government Printing Office, Washington.

In this summary of the use of salt by Indian Tribes, Swanton notes (pp. 419-420),

> The Hopi have obtained their salt from time immemorial from the Grand Canyon of the Colorado, westward from their villages about 100 m. Here salt is gathered with ceremony by making sacrifice to the Goddess of Salt and the God of War, whose shrines are there (Fewkes). The Pueblos have important salt deities, that of the Hopi being Hurúng Wuhti, "The Woman of Hard Substances," who was a sea deity, like the Mexican salt goddess Huitocilmatl.

Talayesva, Don C.

1942 *Sun Chief: The Autobiography of a Hopi Indian.* Published for The Institute of Human Relations by Yale University Press, New Haven, CT.

This extraordinary autobiography edited by Leo W. Simmons is one of the most illuminating studies published about the Hopi that this researcher has yet seen. It provides a glimpse into Hopi culture and demonstrates subtleties to the observant reader which no analysis could so profoundly relate.

In some prefatory material, Simmons comments on the pervasiveness of travel in the Hopi economy (p. 11). He identifies salt as an example of a resource which the Hopi traditionally traveled to obtain (p. 12). Talayevsa's personal account substantiates this claim--he gives an indepth description of his paticipation in an expedition to the sacred Hopi salt mine in the Grand Canyon near the confluence with the Little Colorado River (pp. 232-46). His discussion clearly demonstrates the significance of the Grand Canyon region to Hopi spirituality.

As physical testimony to the longevity of the salt ritual, Talayevsa describes the Hopi shrine, Tutuveni, "where Hopi salt gatherers carve their emblems on the rocks." He explains that "Our ancestors had gathered salt for many generations, and there were hundreds of clan emblems cut into the rocky base of the shrine" (p. 235).

Talayevsa relates the story of how the Hopi learned to take salt from this place by following the shrines left by their gods. He writes, "The salt lies in dangerous territory, and long ago the War Twins had set up shrines and established rules to make the journey safe for the Hopi" (p. 233). He also repeats frequently how important it is to follow these prescriptions of the ritual correctly and with a good heart. This insures a successful return and it also brings rain. At one point, the party, according to the rites of the pilgrimage, stopped to play checkers with the invisible War Twins. Afterwards they prayed, saying, "'Well, War Twins, we have won. Our reward shall be rain, health, and long life. Watch over us, that no harm may befall us'" (p. 235).

In his account of the salt expedition, Talayevsa reveals two other very significant elements of the Grand Canyon to Hopi spirituality. He mentions explicitly, numerous times, that the "House of the Dead" is located here. Talayevsa recalls (pp. 237-38):

> when we looked west along the rim of Salt Canyon, it seemed that I could see houses with windows through which people threw their ashes into the canyon. Blue smoke seemed to rise over the canyon, and my father said that it was from the Houses of the Dead along the rocky rim. I felt self-conscious and uncomfortable, wondering whether our ancestors were watching us and making comments.

Because deceased Hopis live in the canyon, the pilgrimage for salt is considered a particularly powerful and dangerous ritual.

Also within the canyon (but actually within the tributary canyon of the Little Colorado) is the sipapu. Talayevsa describes it as "the opening leading to the underworld" (p. 241). As part of the prescribed journey for salt, the party visited the sipapu. Talayevsa reports that when they arrived there (p. 241):

> The Warrior stuck the prayer sticks at the edge of the hole and sprinkled corn meal eastward, making a path upon which he placed the blue prayer stick and a prayer feather. He placed a second set of offerings alittle farther out on the path for this is the main road that the Six-Point-Cloud-People travel when they emerge from the sipapu to bring rain to the Hopi.

In the appendix (pp. 418-20), Simmons includes a brief summary of the Hopi's origin myth in which he explains the role of the sipapu more fully.

The Hopis commemorate their emergence from the underworld every year in the Wowochim ceremony, which Simmons states, "is performed by the Wowochim, Ahl, Tao, and Kwani fraternities and is believed to portray what happened in the underworld and how the Hopi managed to escape" (pp. 19-20).

Talayevsa also includes an account of his journey to Zuni Lake for salt (252-255). Basically, Talayevsa describes this expedition as traditional but not as ritually-imbued as the one to the Grand Canyon. He explains that, "We could eat modern food on the journey to Zuni Lake, for this is not as dangerous territory as Salt Canyon near the House of the Dead" (p. 253). However, other rituals remained the same, for instance, going through the motions of copulation with the Salt Woman in order to demonstrate respect (p. 254).

Tarbet, Thomas V.

n. d. The Essence of Hopi Prophecy. Privately published, distributed by the Planting Stick, Santa Fe, New Mexico.

A subheading at the beginning of this unpaginaged tract notes, "The entire Hopi prophecy usually takes many days to tell, and many lifetimes to fully understand. This is a short summary of essential points." It was written by Tarbet "and reviewed by a traditional messenger." The tract exemplifies the co-opting of Hopi prophecy by non-Indians interested in environmental/spiritual issues. One of the essential points is the corruption of the earlier world which led to the emergence into this world. Another essential point is the migration of ancient Hopis associated with Maasauu, the caretaker of this land.

Teague, Lynn S.
1993 Prehistory and the Traditions of the O'Odham and Hopi. *Kiva* 58:435-454.

Teague analyzes the oral traditions of the O'Odham and Hopi to gain insight into the events and cultural processes of the late prehistoric era. Her article is indicative of a renewed respect archaeologists are beginning to afford Native accounts of traditional history. As she says, "... oral histories can be shown to conform to ... archaeological evidence to an extent not easily attributed to the construction of an after-the-fact explanation for the presence of numerous ruins throughout the region. These histories reflect direct knowledge of events in prehistoric Arizona."

Based on her analysis of oral history, Teague suggests that prehistoric people chose to abandon the social and economic hierarchy that had developed with large-scale irrigated agriculture in Southern Arizona. During a period of floods following a drought in late prehistory, Teague argues that social conflict between priests abusing their power became unacceptable and that a war was waged to overthrow these priests. The recounting of the specific priests and sites attacked in this war, as recorded in O'Odham oral history, fits well with the archaeological record of late sites in Southern Arizona. As a result of the social upheaval, some people moved to the Hopi and Zuni regions, where they were absorbed into the Pueblo tribes which developed a horizontal rather than vertical complexity based on the kachina cult. The remaining people in Southern Arizona developed a dispersed settlement system that was not based on a complex, hierarchical social organization associated with large scale canal irrigation. Teague thinks that Hopi and O'Odham oral history both support this scenario.

For the Hopi, Teague relies heavily upon the account of Palatkwapi, "a homeland to the south," from whence the *Patki ngum* (Water Clan) and other related clans (Badger, Sand, Tobacco, Corn, and Sun) derived (pp. 444-447). She says that Montezuma's Castle has been identified with Palatkwapi by the Hopi but she thinks there may have been a number of places associated with the name Palatkwapi, representing the different Southern homes of the various clans. The Hopi account of the end of Palatkwapi is said to have resulted from dissension and social breakdown that led to a disastrous flood. After leaving Palatkwapi, the Hopi clans migrated to the Hopi Mesas, some of them stopping at other places such as Homolovi.

Teague cites Garcés who noted in 1775 that the Gila River Pima told him that the Moqui had lived as far south as the Gila River, and that they had built the sites then in ruin in the area (p. 447).

Teague discusses a number of ceremonial and archaeological parallels between Puebloan and O'Odham people that support her thesis, including (1) human figures on Sacaton phase ceramic designs that are similar to one-horned and two-horned priests of the Hopi *Wuwtsim* ceremony; (2) similarities between the Hopi *Wuwtsim* and *Powamuya* ceremonies and the O'Odham *Wiikita* ceremony; (3) similarities in the body painting of ceremonial figures depicted in Hohokam effigy vessels and ceramic bowls from Homolovi; (4) the role of the Water Serpent in Hopi and O'Odham accounts of the flood; (5) importance of shell trumpets for Zuni and Hopi, and the occurrence of these artifacts on late prehistoric mounds in Southern Arizona; (6) the occurrence of directional priesthoods in Hopi, Zuni, and O'Odham society; (7) similarity in the costume of the Hopi Agave Society (*Kwan*) priest and the Tohono O'Odham Corn Meal Sprinker; and (8) similarities in the ritual paraphernalia found in shrines in Southern Arizona (e.g., Double Butte Cave, South Mountain) with Hopi ritual artifacts, including shell frog effigies, prayer sticks, and altar pieces.

Templeton, Sardis W.

1965 *The Lame Captain: The Life and Adventures of Pegleg Smith.* Westernlore Press, Los Angeles.

Templeton's research reveals that in the winter of 1824-1825, Tom "Pegleg" Smith and his traveling companion, Maurice LeDuc, stayed with the Hopi for three days (p. 47). Although Smith recorded no significant information about the Hopi in his journal, it is interesting to note that this is probably the earliest extant documentation of contact between an American and the Hopi.

Tessman, Norm

1986 National Register of Historic Places Inventory -- Nomination Form for Tutuveni. Ms. on file at Hopi Cultural Preservation Office, The Hopi Tribe, Kykotsmovi, Arizona.

This National Park Service form nominating Tutuveni to the National Register of Historic Places was prepared in 1986 by Norm Tessman, Curator of Collections at the Sharlot Hall Museum.

Alternate names for Tutuveni include: Apa'to (Navajo), Oakley Springs, and Hopi Clan Rocks near Willow Springs. The site is located on land under the administration of the Navajo Nation.

Tutuveni is listed as N.A. 994 in the site files of the Museum of Northern Arizona.

The summary states, "Tutuveni is a Hopi petroglyph site comprised of over 2100 clan signs on 40 Wingate Sandstone boulders. These extend for 200 meters parallel to the base of Echo Cliffs." The site size is given as 200 x 100 meters.

In a section on "Vandalism/Intrusions" Tessman writes,

> Comparison with photographs taken by Harold Colton about 1928 (N.A. 4492, 1-45, Museum of Northern Arizona) show that an estimated 80% of the Hopi clan inscriptions are intact. The remainder have been damaged or removed entirely ... Names, dates, bogus clan signs, and a variety of graffiti have been added in recent years. Several of these later inscriptions were scratched or painted across Hopi panels, esthetically damaging but not obliterating them. The continuing vandalism of the site is the primary reason for the urgency of this nomination, as a first step towards other actions to protect this valuable resource.

Tessman notes the site is a popular local drinking place as evidenced by scattered broken beer and wine bottles.

Tessman suggests that Willow Springs and Tutuveni is situated along a major trail or access corridor between the Arizona Strip and the Flagstaff region and was extensively used as an oasis in prehistoric and historic times. Tessman notes that some petroglyphs are weathered indicating "considerable age" and that the Hopi Salt Pilgrimage is thought to have occurred from before contact (12th century) until at least the 1920s.

Tessman considers Tutuveni as "... among the most visually impressive of Southwestern petroglyph sites." He concludes the form by stating, "Modern Hopis contacted by Michalis ((1981), and myself, all expressed great interest in the site and its preservation.

Titiev, Mischa

1941 A Hopi Visit to the Afterworld. *Papers of the Michigan Academy of Science, Arts and Letters* 26:495-504.

Titiev reports that there are frequent accounts of Hopi visits to the underworld. These are sometimes told as if the events occurred in the remote past and sometimes told in the first person. Titiev describes an account of the latter type recounted by Don Talayesva of Oraibi in 1932.

This visit to the dead occurred in the winter of 1907 when Talayesva was seventeen years old and attending the Sherman Indian School in Riverside, California. Talayesva attributed his experience partly to the shock of learning that an older sister had died and partly to an attack of pneumonia that required hospitalization. At times a spirit would appear to Talayesva and tell him that if he did not eat he would die. This spirit wore a dance kilt and sash, had a plain *nakwakwosi* (prayer feather) in its hair, and carried a blue prayer feather in its left hand. Blue is the symbolic color of the west, and the path of the dead and the home of the dead lie to the northwest of the Hopi pueblos.

On Christmas eve, Talayesva was visited by the spirit who said, "Now your time is up. I'll let you travel out from here to the place where the dead people are. The path is already made for you to go by. I'll wait here to see whether or not you are going to come back, and I'll keep hold of you" (p. 497). Talayesva walked out of the hospital "as if he were treading on air," went to the San Bernadino Mountains and entered a long, foggy tunnel that led to the mesa at Oraibi. Talayesva went to his house but his parents and relatives could not see him. He left Oraibi and followed a road where he met a woman with "two hearts" who asked for food and drink. Talayesva declined to feed her and continued on the road, traveling rapidly without touching the ground.

At the west end of a mesa, Talayesva met a Kwanitaka (Agave Man), who advised him to take the left road at a fork since this road had been prepared for him (p. 498). It was sprinkled with cornmeal and pollen. He continued to Coal Canyon, where he encountered twelve clowns (tcuka) who advised him to hurry back or they would bury him. Talayesva next came to a steep mesa and "sort of floated down." Titiev (p. 498) writes, "Soon he arrived at the Grand Canyon and realized he was on a familiar road ... He saw many ruined and deserted houses, such as he as since seen when going for salt." Talayesva came to the end of the road and looked down a steep canyon to something shiny which may have been the Little Colorado River.

Another Kwanitaka appeared and said (p. 499), I waited for you all morning. I'll show you many things. Your time is not up yet. You are careless and don't believe where your people go when they die. You think dogs and burros and animals die and that's all there is to it. I'd like to teach you a lesson. This blanket is for you to ride." Talayesva road to the bottom of the canyon on the blanket. His hair was ritually washed with white suds. Among other things, Talayesva saw a fire pit where spirits (poaka) who had killed

people were thrown into the flames and transformed into beetles. Every year the poaka had taken one step towards the Grand Canyon and had finally arrived.

Talayesva was chased by Masau'u but the Kwanitaka helped him return to the clowns and Masau'u stopped and turned back. The clowns advised him that he had been taught something valuable about the Afterworld and to return to the "ugly man" lying in his hospital bed. Talayesva awoke in bed on Christmas morning. His spirit guide explained that most Hopis never see their guide but that he had taken Talayesva to the Afterworld to teach him a lesson. His spirit guide then vanished.

Titiev compared this account of Talayesva's visit to the Afterworld with a second rendition Talayesva related to Leo Simmons six years later. While there was some variation in the details (e.g., seeing faces along the trail rather than people sitting on houses on the way to Mount Beautiful), the basic elements of the two accounts had remained virtually unchanged. Titiev (p. 503) observes, "This may be the result of frequent repetition, for Don tells his story to Hopi groups on numerous occasions. In this way he refreshes his own memory at the same time that he helps his auditors formulate the Hopi concept of the Afterworld."

Titiev cites Kennard (1937, Hopi Reactions to Death, *American Anthropologist* 39:491-496) to note that a Hopi is regarded as "strengthened" after returning from a visit to the Afterworld." Talayesva believed that his "experience" was granted to him to teach him to value the Hopi manner of life (p. 504).

Titiev, Mischa

1944 Old Oraibi, A Study of the Hopi Indians of Third Mesa. Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, 22(1), Cambridge.

Chapter 10 (pp. 130-141) of this classic ethnography describes and interprets the Tribal Initiation. Young men traditionally went through the Tribal Initiation between adolescence and marriage, usually between the ages of 15 and 20. Prior to the 1940s the rite was practically universal for the entire male population (p. 130). The ceremony was collectively known as the Wuwutcim but it was divided into four distinct branches called Singers (Tao), Horns (Al), Agaves (Kwan), and Wuwutcim. Titiev refers to the entire ceremony as the "Tribal Initiation" to distinguish the ceremony in its entirety from the Wuwutcim branch of the rituals. Adult status was gained by joining any one of the four divisions. At Oraibi membership in the Wuwutcim division was most common. The Tribal Initiation did not take place annually but only when there was a sufficient number of candidates on hand. At Oraibi, the Wuwutcim was controlled by the Kele (Chicken Hawk) Clan, and novices were called *kele* or *kelehöyam* (little chicken hawks). The Kwan division, however, had the most esoteric and least communal rites. Unless there was at least one candidate to join the Kwan the Tribal Initiation was not held (p. 135).

Titiev states (p. 130), "The Tribal Initiations are the most complicated, and among the most vital of all Hopi ceremonies, and their significance must be understood before one can hope to grasp the essential meaning of the Hopi religion." Anthropological understanding of the ritual is somewhat limited by the fact that the Hopis have never allowed any non-Indian ethnologists to view the entire ceremony. Even the well-known anthropologists Stephen and Fewkes were barred from the kiva during key parts of the ceremony in 1891 (p. 133).

Titiev provides a chronological summary of the main events of the nine day long Tribal Initiation rituals (pp. 131-133), and then compares First and Third Mesa performances of the rituals to interpret their meaning (pp. 133-139). The Tribal Initiation incorporates many different concepts or themes. One of these is that the idea of birth is implicitly and explicitly linked with the concept of the Emergence, as Matthews (1902) noted in his account of the Emergence as a myth of gestation and birth. Titiev remarks that to understand the meaning of the Tribal Initiation (p. 134), "... we must recall that not only is the *sipapu* the orifice through which man came forth on the earth, but it is also the direct entrance to the Underworld where live the spirits of the dead. It is to be expected, therefore, that the natal aspects of the Tribal Initiation will be complemented by mortuary features."

The Kwan is regarded with "awe and dread" (p. 134) due to its intimate association with Masau'u, "god of death, and keep of the home of the dead (Maski)." The presence of the Kwan chief in the personation of Masau'u on the first day of the ceremony when new fires are lit in the kivas is a dramatization of the Emergence story where Masau'u taught the Hopi the use of fire.

On the fourth day of the ceremony all visitors were barred from the village and all the trails were closed (p. 135). People were forced to remain indoors and not glance outside as groups of Kwan and Horns patrolled the village. On this night a path to the northwest where Maski is located is established and the dead are invited to throng into the village where a feast was prepared for them. The spirits from Maski participate in rituals conducted in the kivas they had belonged to when alive. As Titiev notes (p. 136),

> What befalls the initiates in the presence of this weird assembly of living Hopi, visible "dead," and unseen spirits, no white man can tell with assurance; but from the general context I think that we may reasonably conjecture that in some manner the novices are ceremonially "killed"—their boyish lives are terminated, and the are re-burn as *men*. At the same time, they are introduced to the "society of the dead" and thus made certain of occupying their proper places in the other world; for there are special "homes" to which only the shades of Kwan, Al, Tao, or Wuwutcim men may go.

In a footnote, Titiev explains (p. 136)

> Deceased Kwan do not go to the general Underworld but to a mountain peak called Kwanivi; the Al go to a lake known as Alosaka; the Singers to Duwanasavi; Wuwutcim to any of the "homes" of Katcinas such as the San Francisco Mountains or the spring at Kisiwu. Possibly only the spirits of Wuwutcim men become Katcinas.

After the spirits participate in the kiva rituals they return to their homes and the path to Maski is obliterated to show the worlds of the living and dear are once again separated (p. 136). On the fifth day of the ceremony the initiates have their hair ritually washed and the receive new names.

Titiev states (p. 136), "If our analysis is correct, the main aims of the Tribal Initiation are: first, to confer manhood on boys; second, to establish co-ordination between living and dead members of the societies; and third, to renew the contacts between the populations of this world and the next."

The Wuwutcim and Tao groups are essentially "fertility cults" (p. 137). The Tao (Singers) know the original songs that were sung at the time of the Emergence (p. 138).

Titiev (p. 139) observes that the Tribal Initiation has "... a powerful effect on neophytes who are being made aware that man I born out of the Underworld and returns there when life is ended on earth. It is to affirm the continuity of life after death that the spirits of the deceased are supposed to present when the youths are 're-born' as men."

Several other special ceremonies related to the Tribal Initiation are conducted during years in which the Tribal Initiation is performed, e.g., Nevenwehe (pp. 140-141).

In Chapter 14, "The Scheme of Hopi Ceremonialism," Titiev interprets the meaning of Hopi religion (pp. 171-178). Titiev notes that when Hopis are questioned about the meanings of their rites, they reply with the stereotyped statement, "We pray for rain, crops, and health." While he doubted this at first, closer examination of rituals reveals many similar patterns and identical features repeated in a variety of different rites. He (p. 171) posits that this intermingling of details "... holds forth the hope that an insight into Hopi religion may be reached through the isolation and interpretation of those essential features which serve as common denominators throughout the rites."

Titiev observes (p. 171), "The most widely spread of the basic concepts of Hopi religion is a belief in the continuity of life after death ..." He agrees with Voth and Fewkes concerning a Hopi belief in the dual nature of body and soul. The soul is *hik'si*, a breath-body. The Hopis do not consider the death of an individual to be a loss. Instead they regard death as an important change in status in which the person is re-born in the Afterworld. Once admitted to the Afterworld, the spirits engage in similar pursuits to what they did on earth. They acquire supernatural power to bring rain. Titiev observes that in all ceremonies the "cult of the dead" plays an important role and each ceremony has a means for making the desiring of the celebrants for rain known to the spirits in the Afterworld (p. 172).

Prayer-offerings in the form of prayer sticks and prayer feathers are the most common way to establish contact with the dead. Titiev explains (p. 171), "Each day the spirits are said to rise from the original *sipapu*, which is the entrance to the realm of the dead, and to look east towards the Hopi mesas. They select the best ones who are summoning them and go to visit them."

Since the dead bring rain, Masau'u, the god of death, is a principle owner of crops. Similarly, Muyingwa, an important vegetation deity, is thought to manufacture seeds in the underworld so the Hopis evoke his help by calling down the *sipapu* of the kiva (p. 172). Prayers to the dead are a common denominator in all Hopi rituals concerned with rain, crops, and health (p. 173).

Another basic elements of Hopi religion is conceptual division of space and time between the upper world of the living and the lower world of the dead (p. 173). The Hopi ceremonial calendar is built on this concept of duality (p. 174).

Titiev observes that (p. 176),

> Several Hopi myths plainly state that the dead merely return through the *sipapu* whence all mankind originally emerged on earth, and one tale even asserts that that "people who died would have been able to revive and walk around on this world four days after death," had not Coyote thrown a large stone over the *sipapu* shortly after the occurrence of the first death on earth. However, Coyote's "foolish action" is believed to have barred only bodies in the flesh from free movement between the upper and lower realms, for human spirits still retain the power to pass in and out of the

> nether realm through the *sipapu*. In fact, the Underworld is regarded not only as the ultimate home to which the soul of a dead person must go, but also as the "place of its [the soul's] genesis before it was embodied."

Titiev (p. 177) notes that the complete cycle of death applies only to those who "... travel the full course of life on earth according to the Hopi pattern." Thus the spirit of a child who dies before Katcina initiation must remain on earth until it is reborn in its mother's next child or to accompany her to the Afterworld when she dies. Girls who are unwed cannot fulfill their functions as rain bringers since they lack the requisite wedding garments. Men who have never passed through the Tribal Initiation must return to the general underworld in contrast to the spirits of the initiates who have special homes for them. The journey to Maski is painfully slow to witches and other evil people, some of which are consumed in ovens from which they emerge as beetles.

Titiev (p. 177) concludes the Hopi belief in life after death as merely a stage in the continuous cycle of events means that Hopis regard their dead not as outsiders but as powerful members of society whose sphere of activity has been changed from the upper to the lower realm. Titiev (p. 178) astutely observes that the Hopis have nothing to fear if an essential religious ceremony is about to lapse since in the Below the different religious sodalities perform much the same rites as the world Above.

In summarizing "the meaning of the Hopi religion," Titiev identifies the dangers the Hopi faced from lack of rain, failure of crops, internal strife, onslaughts of disease, and enemy attacks (p. 177). He thinks that (pp. 178), "Shorn of its elaborate, detailed, and colorful superstructure of costumes, songs and dances, the entire complex of Hopi religious behavior stands revealed as a unified attempt to safeguard Hopi society from disintegration or dissolution."

Titiev, Mischa

1958 The Religion of the Hopi Indians. In *Reader in Comparative Religion*, edited by William A. Lessa and Evon Z. Vogt, pp. 532-539. Row, Peterson and Company, Evanston, Illinois. [Originally published in *Ancient Religions,* edited by Vergilius Ferm, Philosophical Library, 1950.]

Titiev reduces the Hopi religion to what he considers its barest essentials to argue that the Hopi religion is "a local manifestation of universally held beliefs" (p. 539). In Titiev's (p. 539) words, "Shorn of its elaborate and colorful superstructure of costumes, songs, and dances, the entire complex of Hopi religious behavior appears to be a large-scale attempt to safe-guard Hopi society from dissolution." Titiev thinks Hopi religion accomplishes this through beliefs and ceremonies relating to (1) the afterlife, (2) the role ancestors play in the guise of spirits and katcinas bringing rain, and (3) the sun as an agent of germination. Through their religion, the Hopis turn to the spiritual world to seek stability and permanence under all social and climatic conditions.

Titiev refers to the *Sipapuni* in stating (p. 535),

> Perhaps the most fundamental concept of Hopi religion is a belief in the continuity of life after death. As is brought out in their mythology, they believe that in the beginning mankind emerged from an underground home (kiva) to the surface of the earth. Soon after, a witch caused the first death but escaped punishment by pointing out that the deceased has merely gone back into the underground kiva. So insignificant at the outset was the distinction between the quick and the dead that there was freedom of movement between the upper and lower realms until a mischievous Coyote threw a stone over the kiva opening, and thus brought about a permanent separation of the two worlds. Even so, the spirits of the dead are permitted occasionally to visit the living.

In describing the Katcina Cult, Titiev (p. 535) adds, "Not only are clouds and the spirits of the dead interchangeable according to Hopi belief, but they are also equivalent to the supernatural beings called 'katcinas.'" The katcinas emerged with the Hopis but returned to the underworld leaving their masks and dance costumes behind so the Hopis could impersonate them during the performance of rain-bringing dances.

Titiev (pp. 537-538) thinks that the Tribal Initiation ceremony is integral in understanding the essential meaning of the Hopi religion. He notes that "Various parts of the Tribal Initiation also serve to dramatize portions of the Emergence story. The continuity of life after death is affirmed by the supposed presence of visitors from the realm of the dead ..." during the initiation ceremonies.

Titiev, Mischa

1972 *The Hopi Indians of Old Oraibi: Change and Continuity.* Ann Arbor: University of Michigan Press.

This is a rather unusual book which professes to look at elements of change and continuity in the Hopi Indians of Third Mesa between 1933 and the author's last visit to Oraibi in 1966. Unfortunately, however, little effort is made to trace gradually and sensitively the process of transformation throughout this time period. Instead, the bulk of the monograph is dedicated to a seven month period between August 1933 and March 1934 during which Titiev lived with the Hopis and kept a daily journal of his observations among them. The entries from this journal make up the contents of the book with some additional notes and bracketed comments added for explanation, comparison, or validation. Except for these parenthetical interjections, the substance of this monograph fails to provide an adequate context for a meaningful evaluation of the direction and significance of changes in Hopi culture over thirty or so years. Thus, Titiev's assertion towards the end of the book that "Wherever one looks, he is sure to find aboriginal Hopi culture steadily disintegrating under the continuous pressure of irresistable forces of change (349)," suffers from a lack of sufficient evidence.

Nonetheless, the entries the author made in his journal on a day-to-day basis living among the Hopis of Third Mesa provide well-documented, first-hand accounts of life and beliefs of the Hopis in the early 1930s. For this recording of tradition, *The Hopi Indians of Old Oraibi* is useful.

Throughout his diary, Titiev documents the continued practice of ritual salt-gathering in Hopi life until atleast 1934. Early in the book he mentions (p. 39) that a group of dancers from Mishongnovi were "preparing for a salt expedition to Salt Lake in New Mexico." He goes on to explain that according to one of his Hopi hosts, Ned, "Second Mesa folk always go there instead of to the Salt Canyon visited by Oraibi men." The expedition from Mishongnovi, he reports later, took a total of twenty two days--from September 7 to the 29th (p. 64). Ned informs Titiev that "what they will bring back is tastier than store-bought salt (p. 60)."

Titiev interviewed some Hopis who provided detailed information about the traditional salt-gathering ritual. He reports (p. 40): "

> Joe says that in the old days no man could go on a salt expedition until he had gone through Wuwutcim (Tribal Initiation). . . . He also spoke of the difficulties of descending Salt Canyon. . . . Joe told of one man who had made the journey but who didn't dare risk the descent.

Ned offers the author information on one specific aspect of the ritual and its correlation with Hopi practices generally. He discusses (p. 131-32),

> the ritual copulation that each member of an expedition is supposed to perform with a rock that represents the Salt goddess and is known as Ong Wuhti ("Salt Woman"). As is true of all sexual affairs, except in marriage, each man is

> expected to make some sort of payment for favors received, and everyone vows to leave some salt with the deity on the return trip. Many tales of misfortune are told about those who skimp or renege on their promised payments.

Titiev writes in passing that "[d]uring an interview on the gathering of salt, Ned . . . translated the name Clitoris Spring (p. 247)." The significance of this is nowhere discussed in greater detail.

Another interesting element of the salt-gathering ritual which Titiev learned from a Hopi informant concerns the making of Tohopkom. These, he explains, are much like Zuñi fetishes and "are still used in some Hopi rites. . . . Sometimes, they were fashioned in cornmeal dough (*qömi*) by Wuwutcim men on salt-gathering expeditions (p. 44)."

Early in the diaries Titiev mentions that some Hopis would possibly take him on a trip to Salt Canyon for a fee. He remarks that he "Spoke to Dennis about making a trip to Salt Canyon. [This trip never materialized.] He wanted to know about pay. Ned is willing to go for one dollar a day plus expenses, but Dennis probably will want more (p. 49)."

In the final chapter, as mentioned above, Titiev discusses the pervasive elements of change in Hopi culture over a third of a century. Throughout this assessment of cultural transformation, Titiev seeks to differentiate between those discontinuities which are less significant compared to those with profound ramifications for Hopi culture. Regarding this latter category, Titiev argues (p. 352):

> when men gave up making long arduous expeditions for natural salt (n. 4, p. 359) in favor of buying packaged salt, it brought about a *highly significant* change, inasmuch as it freed parties of able-bodied men for the pursuit of many other tasks over a period of several days.

The note cited in this passage immediately above describes that instance of *highly significant* change. The note reads (p. 359):

> Oraibi folk gave up going for salt long ago. Around 1951 a number of Hotevilla men set out for the Salt Canyon, but they could not find the spot and returned empty-handed. I know of no later salt-gathering expeditions from Third Mesa. People from the other Mesas are said to go to Zuñi Salt Lake occasionally by truck.

It is ironic that in the main text in a parenthetical note, Titiev suggests that it was this very practice of salt-gathering (among other things) that contributed to the disintegration of traditional living arrangements on the Mesas and the adulteration of other distinctive Hopi practices which the author focuses on in his discussion of continuity and change. The argument rings of tautological logic. Titiev claims (p. 236):

> The Hopi seem not to have been as stationary and isolated as some North American tribes, notably those in California. Trips to the Salt Canyon from Oraibi paved the way to diffusion from the Plateau and possibly the Plains; and

> Second Mesa expeditions to Salt Lake provided easy access to Zuñi and the eastern pueblos. Then, too, there were numerous intertribal trading expeditions. Thus, we might expect Hopi culture to have assimilated "foreign" traits in historic times, and perhaps earlier.

In addition to information regarding salt expeditions (and the lack thereof), this monograph also provides accounts of traditional Hopi burial practices. On the first of March 1934 a man of Third Mesa died. Titiev describes the events which immediately followed. He writes (p. 258):

> Qöyayeptiwa died unaided around four in the afternoon, Hahai'i hurriedly fetched yucca for washing his head, and Ned and Sidney at once began to prepare the body for burial. . . . After their old uncle was interred, Ned and Sidney took purifying baths, *masnave hompi* , in juniper, and now Sidney will have to make prayer sticks and prepare a "lunch" for the use of the dead man's soul. [Burial customs have undergone several modifications of late, but purifying baths in juniper or cedar are still taken.]
>
> Afterward, Ned gave some of the details of the burial. A grave was dug about six feet deep. Then a groove was tunneled out at right angles, and it was into this groove that the corpse was placed, facing east. The opening was stuffed with blankets and weighted with stones. Then the whole thing was filled in.
>
> In the evening, went to see Anktioni at Chimopovy. At first Ned was going along, but then he decided it would be "indecent" to watch a dance on a day when he had taken part in a burial.

At another point in the journal Titiev relates other information about burial practices. The author reports (p. 142):

> Clothing, water, and *piki* are placed with a corpse for the soul's use. The grave is sealed with rocks. If a person had been two-hearted, coyotes might loosen the rocks to help the spirit begin its painful journey, one step a year, to Maski ("Death House" or the otherworld). Sometimes a bull snake, representing a witch, will emerge from a grave and crawl back into the village. If it should be killed, its soul would speed to Maski like that of a one-hearted person.

One final note on the contents of this book relates to Hopi use of eagles. In one particularly interesting passage the author writes (p. 212):

> In earlier days a number of men used to catch young eagles, feed them in captivity, then "send them home" by strangulation soon after Niman. In 1955 Jack was the only man to keep an eagle at Oraibi. He delayed "sending it home" until after the departure of a "White" couple who were staying at his house. Conditions were better in 1964, for there were many captive eagles in various villages.

Thompson, Laura

1950 *Culture in Crisis, A Study of the Hopi Indians.* Harper and Brothers, New York.

In a brief section on diet, Thompson states (p. 51),

> Salt was obtained in the vicinity of the Grand Canyon, a twenty-day journey from Hopiland. Salt expeditions were long and arduous undertakings by young men during which they were exposed to thirst, enemy Indians, and various supernatural dangers. More recently salt was obtained at a salt lake forty-two miles south of Zuni Pueblo, two hundred miles away. Now is it purchased at the trade store.

Thompson, Laura and Alice Joseph

1947 *The Hopi Way*. University of Chicago Press, Chicago. [Originally published in 1944 by Haskell Institute for the United States Indian Service.]

This ethnography was prepared as part of an ambitious series intended to assist the Indian Service in the administration of Federal Indian policy by increasing understanding of Indian cultures and world views. The five sections of the book are entitled "The Hopi Web of Life," "The Journey from Birth to Death," "Some Young Hopi en Route," "Growing up to be a Hopi," and "In Retrospect."

In a discussion of the traditional Hopi economy the authors observe that (p. 22), "In the past the Hopi depended on natural products much more than they do today. The young men went on long collecting journeys, during which they were exposed to thirst, enemies and supernatural dangers. The most arduous of these was to the vicinity of the Grand Canyon to get salt and pigments."

In a diagram of "Hopi Trade," the authors depict the Havasupai trading paint and buckskins to the Hopi in exchange for corn (p. 23).

The Hopi world view is articulated in a section called "A Stone Age Theory of the Universe." Thompson and Joseph note that the Hopis have an "original and basically integrated theory of the universe" which they use to organize their world, cope with life problems, and obtain security in a hazardous environment (p. 36). They describe this theory by observing (p. 37),

> Theoretically all phenomena, natural and supernatural, living and dead—including man, animals, plants, the earth, sun, moon and clouds, the ancestors and the spirits—are interrelated and mutually dependent through the underlying dynamic principle of the universe—which we shall call the law of universal reciprocity. This law implies the concept of immanent or cosmic justice. The emphasis is ... on the mutual exchange of essentially equivalent but not identical values according to fixed traditional patterns, in the interests of the common weal.

Humans have an active role in the reciprocity principle. The world of nature is compelled to respond in prescribed ways but humans both respond and elicit responses. Humans thus exercise a limited control over the universe (p. 37). Hopi philosophy therefore ascribes to humans an element of choice dependent on their will.

The Hopi sense of space and time is ordered in three dimensions with six sides corresponding to the cardinal directions with the upper world of the living and the lower world of the dead (p. 39).

The responsibilities of humans form an ethical code called the "Hopi Way" (p. 41). The Hopi Way expresses the Hopi world view at an emotional and behavioral level. It is a

code for rules of proper acting, feeling, and thinking for every role a Hopi is required to assume in his life cycle.

The Wuwutchim ceremony in November is referred to as the "Grown Man" ceremony. This initiation (p. 43) "emphasizes spectacularly the Hopi concept of the male principle in the creation of life, the Hopi concept of death and rebirth of the individual in the Underworld where he continues to live in a manner similar to that in the Upper-world, and the Emergence of the tribe."

Thompson and Joseph conclude their description of Hopi world view by stating (p. 44), "Duality in the Hopi world view exists only insofar as it represents two correlates in a reciprocally balanced universal scheme, and each correlate is conceived as an indispensable part of the whole, neither one being essentially subordinate to the other."

Turner, Christy G.

1963 *Petrographs of the Glen Canyon Region, Styles, Chronology, Distribution, and Relationships from Basketmaker to Navajo.* Museum of Northern Arizona Bulletin 38, Glen Canyon Series Number 4.

This report, summarizing three years of "petrographic analysis" in the Glen and San Juan Canyons was a by product of the Glen Canyon Salvage Project. The field work was conducted from 1958 to 1960. Styles of petroglyphs are dated by ceramic associations, deterioration, and superimposition. In general, the abundance of petroglyphs is directly proportional to the occupation intensity of the various prehistoric occupations. Five stylistic horizons are defined: (1) Navajo-Paiutes, Anglos [1850-present], (2) Hopi [1300-present], (3) Anasazi, Kayenta, Late PIII [1200-1300], (4) Anasazi, Kayenta and Mesa Verde, PII-III [1050-1250], (5) Anasazi, Basketmaker, PI, Early PII [pre-1050].

Turner (p. 1) defines style as a characteristic modal expression of elements, designs, and techniques, while style horizons are styles with specific time and space considerations. He notes that the use of classes and class intervals in his analysis is purely a necessity of data presentation, and that he believes there is actually a continuum of design styles intergrading from the four prehistoric central tendencies. He does not think there are any abrupt style boundaries between the dated style horizons.

Turner believes the earliest petroglyphs were equated with the Desert Culture, while all other styles were diffused from south to north along the Rio Grande and Colorado Rivers. He states (p. xi),

> Anthropomorphic deification existed prior to A.D. 1050, and it is suggested here that this deification could be the foundation on which the kachina cult of later years is built, or that it represents the earliest manifestation of the cult in the Anasazi area. Certain of the present day Hopi Indians are considered to have had ancestral clan affiliation with the prehistoric occupants of the Glen and San Juan Canyon.

Turner also states (p. xi),

> No evidence exists of early Navajo petrographs in this region as is found further east. Diffusion of what appears to be Style 4 (A.D. 1050-1250) into southern Oregon and central Washington is hypothesized to indicate primary "contact" on the part of the eleventh to thirteenth century Anasazi with the Athabaskan migration into the Southwest, representing a secondary response to the initial "contact."

Style 2 (Hopi, 1300-present) was dated by comparison to petroglyphs around the Hopi villages and near Moenave (p. 5). Turner states (p. 6)

> Style 2 is linked with Hopi revisitation of the canyons from the 14th century to the present, as evidenced by the occasional Hopi yellow and utilityware sherds found on the surface ... Hopi pecking techniques produced shallow dinting and incising and petroglyph sites around the Hopi villages show a similar technique ... Known subject matter ... includes identifiable kachina representations, poorly executed anthropomorphic figures, diagonal-hatched sandals, clan symbols, sheep, and circular designs. Style 2 has a very low frequency in Glen and San Juan Canyons, and considerably more frequency is found outside the region near Moenave (Willow Springs) and the Hopi Mesas.

> It would seem on the basis of design analysis, that Hopi Style 2 is very strongly related to Style 4. However, new elements and design combinations ... are introduced in Style 2 times in the Glen Canyon region which are indicative of influences from some unknown outside source.

Turner (p. 9) finds striking design parallels between the Style 2 petroglyphs and Wupatki and Kayenta Black-on-white and Jeddito Black-on-yellow pottery.

Turner (pp. 22-25) uses Hopi informants and ethnography to argue that all petroglyphs showing humpback figure with or without flutes are not depictions of Kokopele. He concludes (p. 24),

> There is most certainly a resemblance between the humped-back flute player and Kokopele, but during the 10th and 11th centuries when he makes his first appearance in the Glen Canyon region he may not have had any association with any kachina and surely must have represented either mortal traders, migrants, or clan symbols. It should be conceded that the humped-back flute player petroglyph does not represent Kokopele in the Glen Canyon region, but it should be noted that this line of inquiry brought out the fact that several of the Hopi clans can be inferred to have had some familiarity with the Glen Canyon region. These are the Spider, Water, Tit-mouse, and possibly the Reed and Snake clans. [Turner then summarizes information in Voth (1905:24-25) about clan migrations relating to the area northeast of the Hopi Mesas].

Several Hopi informants (only identified as J.K. and W.C.) examined the humped-back petroglyphs, providing information about Kokopele and explaining why they thought the flute player was a clan symbol. One of these Hopis is quoted as saying,

> This clan 'with this religion' went north and is supposed to warm up the earth. Even playing flute all the time didn't help and those people had to turn back and when they get to Oraibi they put this religion up. Those people had lots of songs to make country warm. These clans *Patkimyam* (Water clan) and *Kokongyam* (Tit-mouse clan) have flutes, the Water clan has the gray flute players and the Tit-mouse clan has the blue flute players. The Spider clan came from the north also. In Hopi travels they left people for seeds.

Turner believes that the production of petroglyphs was motivated by eight different factors. He suggests (1) that some petroglyphs were made to recollect events that took place in the winter homes, which he says is demonstrated by the fact that in Navajo Canyon, the greater the distance from the Highlands (winter homes, the more petroglyphs of kachinas are found. Upon reaching the Colorado River, the katchina has become a dominant form (p. 27). He cites the work of Fewkes (1892:19-26), who was able to identify specific mythological personages depicted in rock are that were still seen in ceremonials then practiced. Turner also suggests astronomical phenomena were portrayed in rock art.

Turner notes (p. 27-28),

> Of the illustrated clan symbols belonging to different Hopi phratries listed in Fewkes (1897:1-11), the *Pakti* (waterhouse), *Tocua* (snake), and *Pakab* (reed) totemic symbols have the greatest similarity of designs with the Glen

> and San Juan Canyon petroglyphs. While the designs shown in Fewkes' article are definitely Style 2, some ... also resemble Style 4 designs.

Other motivations (p. 28) include (2) sympathetic magic concerning the hunt, evidenced by the many zoomorphic designs of mountain sheep portrayed as being hunted or with hunting shafts attached to their back; (3) the practice, creation, and remembrance of designs for blankets, sandals, pottery, and basketry (whose designs may have also had ceremonial connotations); (4) teaching of novitiates about the ceremonial side of the Anasazi world (in a way analogous to how katchina dolls are currently used); (5) clan symbols; (6) creative impulse; (7) propitiatory gestures, "fetishtic" reverence, or fertility tokens; and (8) idle "doodling."

With regard to clan symbols, Turner (p. 28) states,

> Clan symbols ... may have been carved and elaborated upon in order to delineate communal lands, record events, or mark trails. Voth (1905:23) recorded one aspect of the wanderings of the Hopi: 'When the spider clan arrived at Muenkapi they made marks or wrote upon a certain bluff, east of Muenkapi saying that this place should always belong to the Hopi, that no one should take it away from them, because there was so much water there.' For a comparison of Glen and San Juan Canyon petroglyphs with actual clan signature, see Fewkes (1879:1-11). Forde (1931:368) shows Hopi petroglyphs (Style 2) which actually were used to delimit clan lands. The clan symbols were applied to small upright slab boundary stones (*kalani*) which were set up in the corners and junctions of different clan plots.

Turner (p. 29) posits the majority of the people producing petroglyphs were men, based on an inference from the nature of the interests portrayed, i.e., the hunt and kachina-like figures. As Turner summarized,

> Compounding assumptions, then petroglyphs were primarily the work of men and their interests so depicted centered about hunting (sheep), religion (kachinas), weaving (design motifs), and farming (maize and sunflowers). Conversely women did pottery making, basketry, and gardening. Apart from gardening, this division of labor, inferred from petroglyphs, is essentially the same as that found among the Hopi today. To go still further, it can be said this division of labor has been a long-established tradition of at least some Hopi prior to their settlement on the Hopi Mesas. If traditions can last 700 years, as suggested, a vital distinction can be drawn between the ethnic groups occupying the Glen Canyon region now and in the past. Namely, the Navajo now living in the Glen Canyon region bear no material cultural resemblances to the prehistoric Anasazi and, on the inferential level, the Navajo lack many non-material culture traits that were present during the 11th or 12th centuries.

Given the prevalence of female figures in the fertility symbols of "primitive" cultures and in contemporary drawings in public places, Turner finds the rarity of female figures in prehistoric petroglyphs to be "meaningful" (p. 29).

Turner's analysis of the distribution of the petroglyph styles shows that through time the styles occur in an increasingly circumscribed area (pp. 30-37). He makes a number of interesting conclusions in interpreting these patterns. With regard to migrations, he states (p. 32),

> In Glen Canyon, Style 2 is located most often at Pueblo II-III habitation and camp sites near river and canyon crossings. This suggests individual movement out of the Hopi country into surrounding areas that were already known to some or all Hopi and that traditional trails were followed for the purpose of trade, gathering, hunting, collecting, or other reasons. One possible motivation agreed upon by Hopi informants was the frequent revisitation of Hopi shrines away from the Hopi villages. If this is true, there is all the more reason to believe that a direct cultural relationship exists between the Pueblo II-III inhabitants of the Glen Canyon and the 14th century Hopi Indians returning to the Pueblo II-III structures which they had abandoned but remembered ... The distribution is thus a result of travel along already established trails and routes within the Glen Canyon region and is not due to indigenous localized groups living at these fording and crossing stations. This belief if further substantiated by the meager amounts of refuse attributable to Pueblo IV people.

Turner quotes C. Mindeleff (1891:136) concerning the Chief Kiva at Hano, *Toko'nabi* (or *Dokot'navi*), which takes its name from the Hopi place name for Navajo Mountain ("High Place"). He also cites Fewkes(1900:582), listing ten clans that came from the north in prehistoric or early historic times: Snake, Puma, Dove, Cactus, Opuntia, *Nabovu*, Horn, Deer, Antelope, *Tcaizra*. The relatively small Coyote and Burrowing Owl clans are reported to have come directly from Navajo Mountain relatively late in the sequence of arrival. Turner (p.33) concludes, "Thus in the 1890's there was traditional lore among the Hopi that indicated societal relationship between the Navajo Mountain area (thus the Glen Canyon basin) and the present-day Tusayan Pueblos."

With respect to the widespread distribution of Style 4, Turner observes,

> The southern boundary of Style 4 is interesting in still another respect. Colonial and Sedentary periods at Snaketown have design elements ... which do not appear in the Kayenta culture area until 200 years later. These forms, which are found on Colonial and Sedentary pottery, include scrolls, keys, terraced figures, life forms of lizards, birds, repeated anthropomorphs, flute players, sunbursts, and insects. Even though the designs are to be found mainly in nature (excluding the flute player) they *do not* appear in the Kayentya area petroglyphs until after A.D. 1050. Thus I feel that the elaboration of the Style 4 designs takes it origin (both fusional and replacement) from the Hohokam culture to the south, since no other source for these designs exists in the Southwest at this time.

Turner (p. 39) quotes Steward (1941:354) to make that the point that Glen Canyon was "a kind of no-man's land which had been very slightly settled by outposts from both Mesa Verde and Kayenta and which had come into contact with the Northern Periphery but had not strongly influenced it.

Turner's final conclusion regarding the Hopis is,

> Through Hopi informants, written records of Hopi traditions, and study of the Glen Canyon region petroglyphs, a conclusion was reached that the Spider, Water, Tit-mouse, and possibly the Reed and Snake clans could have been familiar with the occupation of the Glen Canyon region between A.D. 1050-1200. These clans are implicated with the prehistoric occupation remains, both within the major river canyon systems and the pueblo centers in the southern Navajo uplands and adjacent river canyon

mesas. It is not felt these clans were involved solely in the more recent Pueblo IV revisitation of Glen and San Juan Canyons.

The 102 figures at the end of the report contain a number of interesting observations from Hopi informants who recognized a number of the design elements.

United States Geological Survey

1886 Arizona, Tusayan Sheet, scale 1:250,000.

This nineteenth-century map superimposes Indian trails and roads onto the landscape between the Hopi Mesas and the nearby Colorado and Little Colorado Rivers. It documents an elaborate network of trails from the previous century which connected Hopis to places and peoples in their surroundings.

Victor, Frances Fuller

1870 *The River of the West.* R. W. Bliss & Co., Hartford, Connecticut.

In this book recalling the history of early frontier activities on the Colorado River, Victor relates a story of a group of trappers, including Joe Meek, who contacted the Hopi in 1834. The group of Americans raised havoc at the Mesas, with two men, Jervais and Frapp, ransacking the Hopis' gardens and killing fifteen to twenty people. Meek claimed to have watched the entire incident from the sidelines (152-153).

Voelker, Frederic E.

1971 William Sherley (Old Bill) Williams. In *The Mountain Men of the Fur Trade of the Far West*, edited by LeRoy R. Hafen. Glendale: The Arthur H. Clark Company.

The following passage about "Old Bill" Williams documents the role the Hopi Indians played in the dissemination of knowledge about the Grand Canyon to early nineteenth century fur trappers in the Southwest.

p. 379, "By a devious trail the arrived at the 'extreme border house where a civilized man lived,' the Cienga Amarillo rancho of Pedro Sanchez, whom Bill had met at Zuni Pueblo in 1827. Continuing west, they crossed the Little Colorado River, and one day met a hunting party of Hopis who directed them to the Petrified Forest. Fascinated, they rode through it to a Hopi village where they learned enough about the Grand Canyon to urge them toward its rim, and after a zig-zag trip they camped above Marble Canyon, where they sat in enchanted stupor."

Volante, Enric

1988 Hopis Gather Golden Eagles in Religious Ritual. *Arizona Daily Star*, July 10, pp. B1, B9.

This newspaper article describes the ritual collection of Golden Eagles by Hopis from Second Mesa in 1988. Shipaulovi Two Horn Priest Archie Humeyestewa is quoted as saying, "These eagles are humans, just like us ... They're here for a purpose." The article notes that the eagles collected will "be smothered as part of an annual ritual meant to sustain life on earth."

Volante describes how Harlan Williams, Gibert Pablo, Robert Harris, and Archie Humeyestewa collected eaglets from buttes near Holbrook, an area used by the Eagle Clan for as long as Williams can remember. Williams is quoted as saying he no longer carries a rifle to hunt rabbits for eagle bait since he does not want to give Navajos an excuse to raise a weapon in response to his presence on land that was recently decreed to be part of the Navajo Reservation. After collecting two eaglets, the Hopis make a prayer meal offering and then quickly "hiked down the mountain, anxious to avoid a confrontation with Navajos."

Williams states, "I want to continue coming to these buttes, where I've been going for all the time that I can remember, and my forefathers and uncles. I don't go out and bother anything. All I'm doing is going to my shrines. And if eagles are there, I receive them."

In earlier times, pilgrimages to collect eagles were made using horses or burros for transportation and lasted up to two weeks in duration. Children's cradle boards were used to transport eagles.

The eagles taken to Shipaulovi are ritually washed like a newborn child and tethered to a rooftop perch. Volante says, "From rooftops, Hopis say, the eagles watch over the villages to see whether people are leading proper lives. When eagles die, they are said to return as messengers to the Creator to report what they have seen."

Tribal Vice Chairman Vernon Masayesva is quoted as saying, "The eagle is a powerful bird to the Hopis. The whole family structure centers on the eagles when the are brought in." Boys have the responsibility to hunt for the squirrels and rabbits used to feed the birds and girls are taught to prepare food for the eagles before cooking for their own family.

The eagles are ritually smothered after the Home Dance and the feathers are plucked and distributed among clan members. Walter Hamana is quoted as saying "Its not a matter of killing something. Its a matter of Hopis doing this for your benefit and mine and mankind throughout the world. Its on their behalf that these things are done, so that life here on Earth will continue. So they're reviving and sustaining life; they're not killing anything. That's the way the Hopis look at it."

Volante, Enric

1988 Eagle Gathering Worries Navajos, Some Biologists. *Arizona Daily Star,* July 10, p. B9.

This articles summarizes a controversy about the Hopi's ritual collection of Golden Eagles from land awarded to the Navajo Nation as part of the Navajo-Hopi land dispute. The Navajo Nation claimed many Hopis collecting eagles were trespassing on Navajo land since they had not obtained federal or tribal permits to collect raptors.

Volante states "Fearful that issuing a permit would set a precedent that could lead to increased killing of eagles, the U. S. Fish and Wildlife Service (FWS) had ignored the Hopi harvest, since it was not considered excessive, agency officials have said." However, in 1985, the FWS issued a permit for Hopis to collect eagles, an action that the Navajo Nation criticized since it did not consider that an adequate environmental assessment of this undertaking had been conducted. Although Golden Eagles are not an endangered species they are protected under the Bald and Golden Eagle Protection Act and other federal laws.

K. C. Fredericks, the FWS regional director for law enforcement, is quoted as saying, "This is a deeply religious and significant event for them [the Hopis] and so far they seem to be managing the numbers and the collecting — as far as we can tell — quite well." It is estimated that the Hopis collected eighteen eagles, a number that Fredericks considered to have an "insignificant" impact on the adult breeding population since six out of ten eaglets die from natural causes.

Pat Ryan, a Navajo Nation wildlife biologist is quoted as saying, "I personally think there is room for a harvest — to a certain extent." But he notes that he thought the WFS was irresponsible in issuing a permit without an environmental study.

Volante notes the Hopis rely on prayers and ritual offerings at eagle shrines to ensure the eagles will continue nesting in the area. He states, "Although some Hopis obtain eagle hunting permits as a practical matter, they liken the permits to requiring a Christian to be licensed to enter a church." Archie Humeyestewa, a Two Horn Priest and member of the Hopi Tribal Council is quoted as saying, "These prayer feathers that I prepared and deposited (at shrines) are the only permit that we need, because we've been doing it ever since the beginning of time, when we settled these areas."

Some biologists are reported as being more concerned about the impact of Navajo overgrazing and increased development of the region on the eagle population than by ritual harvesting of eagles by Hopis.

Although the FWS has a program to provide eagle feathers and carcasses to Indian Tribes, the Hopis require live eaglets because they, "have the power of lightness and purity needed to carry prayers to deities," as a Hopi legal brief states.

Voth, H. R.

1905 *The Traditions of the Hopi.* Field Columbian Museum, Publication 96, Anthropological Series 8.

This collection of narrative accounts from Second and Third Mesas begins, appropriately, with the Hopi "Origin Myth" as recounted by Qöyáwaima from Oraibi. To set the context, Voth appends a note which states (p. 1), "The events here related are supposed to have happened in the lower world. The increasing of the various peoples and tribes, and the constant contentions among them, finally led to the emigration from the nether world through the sípapu into this world, the account of which is related by variant traditions of the Hopi."

The version of the emergence narrative that Voth provides in this work was told by Lomávantiwa from Shupaúlavi. Lomávantiwa begins by describing the state of disorder and conflict which existed in the Underworld before emergence. He says (p. 10),

> A long time ago the people were living below. There were a great many of them, but they were often quarreling with one another. Some of them were very much depraved. They abused the women and the maidens, and that led to very many contentions. So the chiefs, who were worried and angry over this, had a council and concluded that they would try to find another place to live.

Resolved to do so, the chiefs sent a mockingbird to find a place of exit out of the Underworld. They also caused a great flood to emerge out of the ground (p. 10). The mockingbird returned after finding an opening in the sky. The chiefs then planted a pine tree (calávi), another kind of pine (lõoqö), a reed (bácavi), and a sunflower (áhkawu) by which the people could climb out of the sípapu. The people climbed through the opening with the help of the Twin War Gods. Voth (p. 11) also reports that, "The mocking-bird sat by and sand a great many songs, the songs that are still chanted at the time of the Wúwuchim ceremony."

The first people that emerged (p. 11) "... remained around the sípapu, as the opening was, and has ever since been called."

In part 4, "The Wanderings of the Hopi" as told by Yukioma of Oraibi, it is noted that at the time of the emergence (p. 18), "... there were all kinds of people living down there, the White Man, the Paiute, the Pueblo; in fact, all the different kinds of people except the Zuñi and the Kóhonino, who have come from another place."

Lomávantiwa from Shupaúlavi provides a narrative of "The Snake Myth" (pp. 30-36), which recounts the journey of the Chief's son at Tokóonavi, north of the Grand Canyon, who often (p. 30) "pondered over the Grand Canyon and wondered where all that water went to."

Sikánakpu from Mishóngnovi provides another version of the "The Snake Myth" (pp. 35-36), in which the (p. 35) "The old men often wondered where the Colorado River was flowing." The old men put a young man into the box they constructed with a pole to guide it and four bahos and (p. 36) "... sent the box off floating down the river."

In a footnote Voth notes (p. 36),

> The Hopi agree in their different tales that after leaving the sípahpuni, not only the different nationalities scattered and took different routes towards the East, but also those people whom they considered their forefathers, scattered and traveled eastward in smaller and larger bodies. They stopped at various places for shorter or longer periods, and it was in these wanderings that the different clans were created, and it is by reason of this separation and of the traveling eastward of the different bodies by different routes, that the traditions and tales of the different clans vary so considerably from each other.

In "The Wanderings of the Bear Clan (Hon-Ñamu)" by Lomávantiwa from Shupaúlavi (pp. 36-38) and "The Wanderings of the Spider Clan (Kohkang-ñamu) by Tawíima from Mishóngnovi (pp. 38-41), the way in which various clans were named is described.

Voth, H. R.

1912 Notes on the Eagle Cult of the Hopi. In *Brief Miscellaneous Hopi Papers*, Field Columbian Museum, Publication 157, pp. 105-109.

This article briefly summarizes how the Hopis procure and use eagles in their religion.

With respect to gathering, Voth states (p. 107), "The territory around the Hopi villages where eagles may be found is, and has been from time immemorial, divided into portions or allotments, which are controlled by certain clans and families. These territories extend as far as 50 and 60 miles from the villages."

He also says (p. 107), "Every spring hunting expeditions set out to procure young eagles. These, when captured in their roosts, are usually tied to racks ... and carried to the villages where they are kept of the flat house tops, tied by one leg to some beam, rock or peg to prevent their escape ... Here they are fed with rabbits, field mice, etc. until about July, when they have grown to full size. The number of birds, thus captured, varies very much in different years. One year their were thirty-five in the village of Oraibi alone. Among these are usually also various kinds of hawks, especially a certain large kind, which the Hopi call 'red eagle,' the feathers of which are used very extensively for prayer offerings, masks, eagle shafts, etc."

Voth notes (pp. 107-108), "In nearly all the principal ceremonies the eagles are remembered by prayer offerings, prepared for them by the priests. These consist usually of small eagle or hawk feathers, tied to a twisted cotton string, about four inches long, and are called nakwakwosis. These nakwakwosis are handed to those priests who are part owners in an eagle allotment and who deposit them with some sacred meal in shrines, devoted to the eagles."

The Hopis have Eagle Katcinas, and these Katcinas receive prayer offerings at the dances, which they deposit at Katcina shrines "that the eagles may not fail to lay eggs and hatch them again the next year" (p. 108).

The eagles are ritually killed after the Niman Katcina ceremony (pp. 108-109). The feathers are plucked for ritual use, and the eagle bodies are ritually buried in grave-yards located close to the villages. In addition to being used in nakwakwosis, the eagle feathers are used on masks, standards, altars, arrow shafts, and for many other purposes. Many different prayer feathers and prayer sticks incorporate eagle feathers in their offerings.

Eagle bones are used to make whistles that are used in "all ceremonies of any importance" (p. 109).

Voth also notes, "... an eagle feather pũhu (road) is placed to the west of the grave of departed Hopi to show them the road to the skeleton house."

Wallace, William Swilling (editor)
1961 Lieutenants Pershing and Stotsenberg Visit the Grand Canyon: 1887. *Arizona and the West* 3:265-284.

This narrative by John Miller Stotsenberg describes a trip that he and Lt. John J. Pershing made to the Grand Canyon in 1887. These two army officers made a recreational trip from Fort Wingate in New Mexico through the Hopi Mesas to the Grand Canyon. In a brief preface, Wallace describes their route as approximating what later became U. S. Highway 66 from Fort Wingate to Gallup, NM, via the Navajo Reservation road through Oraibi to U. S. Highway 89 near Cameron, Arizona, and thence to Arizona State Highway 64 and the Grand Canyon.

Stotsenberg and Pershing were accompanied by a packer and a Navajo scout during their trip. Their original destination was the Hopi villages but along the route they decided to visit the Grand Canyon. After visiting Keams Canyon, Walpi, and Oraibi, the party traveled to Moencopi and Tuba City. Their descriptions of all of these places contain interesting tidbits of historical information about Hopi agriculture, architecture, and society, and about the Mormons in Tuba City that beyond the direct scope of the Hopi GCES project.

Stotsenberg and Pershing had a perilous "adventure" between Moencopi and the Grand Canyon in that they traveled without a guide, had difficulty in finding the trail, ran short of water, and had trouble with their packer and pack animals. Running short of water was especially difficult. After overcoming these difficulties, Stotsenberg and Pershing encountered two Supai Indians hunting antelope, and eventually arrived at John Hance's cabin on the rim of the Grand Canyon. Stotsenberg and Pershing hiked to the bottom of the canyon before leaving to return to Tuba City, Oraibi, and Keam's Canyon.

Of interest to the Hopi GCES project is the fact that trail that ran from Moencopi to the Little Colorado and then to the south rim of the Grand Canyon was well known by non-Indians in 1887. After this trail was described to them by Mormons, Stotsenberg and Pershing were able to find it, albeit with some difficulty. The fact that the army officers encountered Supai Indians along the trail indicates it was a major route of travel in the area.

Wallis, Wilson D. and Mischa Titiev

1945 Hopi Notes from Chimopavy. *Papers of the Michigan Academy of Science, Arts, and Letters* 30:523-555.

This article is based on information provided by Joshua He-mi-yesi-va (Humiyesva), a student at Carlisle Indian School, during a three week visit to the University Museum in Philadelphia in 1912. The material was "secured" by Wallis and Titiev and Elsie Clews Parsons added comments and comparative data. Twenty plates of Hopi shields drawn by Humiyesva follow the text of the article.

In a list of birds (p. 528), the *Kela* or desert sparrow hawk (*Falo s. phaloena*) is described as "The bird that first attempted to find a way out of the underworld for the Hopi."

With respect to rain, it is noted (p. 545),

> Those of the dead who were good people while on earth become Cloud People after death. They have a round, nearly flat tray made of cotton, called *bac'taawota,* in which they carry water; another in which lightening is carried; and a third in which thunder is kept ... They lift them up to the wind, and water sprinkled from them causes rain. They ... take water out of these trays with their hands, and sprinkle it out into the air, but never throw out all of it.

Plate IX illustrates a shield bearing the sign of *cakwachi* (friendship). Humiyesva describes it as "Na-a-gwatch'sta, 'making friends.' The crescents represent clasped hands, emblematic of peace and truce." One crescent is green, the other is blue. Friendship marks also appear on a shield illustrated in Plate XVII.

Warner, Ted J. (editor)

1976 *The Dominguez-Escalante Journal.* Fray Angelico Chavez, translator. Brigham Young University, Provo, UT.

Warner's edition of Escalante's travel diary from 1776 (originally translated by Fray Angelico Chavez) includes important information documenting trails linking Hopi and Paiute territory.

In describing the trail followed from the Crossing of the Fathers on the Colorado River to the Hopi Mesas, Escalante mentioned frequently that the trail was well-worn and maintained by human industry.

Traveling around Navajo Mountain, Escalante described the trail as "a well-beaten path" (p. 102). The trail which the explorers took to Oraibi had been improved "with loose stones and sticks" and the construction of a staircase (p. 104).

Escalante also mentioned that [San Juan] Paiutes, directed him to "two trails, one toward the Cosninas [Havasupais] and the other to El Pueblo de Oraibi in Moqui" (p. 104).

Waters, Frank, with drawings and source material recorded by Oswald White Bear Fredericks.

1977 *Book of the Hopi*.. New York: Penguin Books. (First published by Viking Press, 1963).

In this book Frank Waters has set out to write the first definitive and complete account of Hopi life, beliefs, and history ever compiled. This is a tremendous task that few scholars could ever possibly accomplish. Making success even more unlikely in this case is Waters' decision to base such an authoritative work upon information provided solely from oral interviews with some thirty Hopi elders.

Beginning with the first section of the book entitled, "The Myths: Creation of the Four Worlds" already this problematic assumption that thirty people could possibly represent the views of thousands of Hopis over time and space proves inadequate. In recounting the Hopi myth of emergence from the Third World to the Fourth, Waters describes a story so vastly different from those told by other ethnographers of his time and earlier, that the credibility of his research and reporting becomes suspect.

In Waters' account, the people passed from the Third World into the Fourth by being tucked away inside hollow reeds by the Spider Woman and floating on the rising waters which covered the Third World and delivered these floating human-filled reeds to the Fourth World. The presence of such reeds in this story is significant because it is a shared component with another variation of the emergence myth reported by multiple anthropologists and historians of the Hopi. In this other account of the origin myth--not told by Waters--the people of the Third World climbed from their home in the Underworld inside a tall hollow reed and through the *sipapu* into the Fourth World (pp. 17-20). What is surprising here is not so much that Waters has told a variation on the Hopi origin myth--this lack of consensus happens regularly among peoples who share an unwritten history (and also among those with a written one)--but that Waters refers to the *sipápuni* throughout the text as the "Place of Emergence (pp. 76, 344, and others)." It is most curious that he does not try to rectify this inconsistency by offering other versions of the story of emergence.

Part Two is dedicated to the legends of clan migrations (pp.29-122). These are each clans' stories of their journey from their shared point of emergence to their ultimate destination, the Hopi Mesas in the Arizona Desert. Here, Waters acts more responsibly as a chronicler by mentioning some discrepancies and inconsistencies in some of the stories and even citing his source of information at times in footnotes. But, generally, his accounts are monolithic and attached to no particular interviewee or corroborating literature.

Waters' account begins with the prescriptions for migration given by Másaw, God of the Fourth World. He explains (p. 31):

> Upon their Emergence to this new Fourth World, the people were told that they could not simply wander over it until they found a good place to settle down. Másaw, its guardian spirit, outlined the manner in which they were to make their migrations, how they were to recognize the place they were to settle

> permanently, and the way they were to live when they got there. All this was symbolically written on the four sacred tablets given them.

In discussing the possible interpretations of some of the pictures inscribed on these tablets, Waters reports that on one, drawings of cornstalks and various animals are encircled by two snakes. Waters writes, "The two snakes symbolized the two rivers that would mark the boundaries of the people's land (p. 32)." And in the footnote below he clarifies that these two rivers would be "The Colorado and the Rio Grande Rivers."

Waters also analyzes petroglyphs and kiva murals to inform his accounts of the clan migration legends. The petroglyphs accompany each story individually and serve to buttress Waters' accounts. The many pictographs or murals which Waters includes (pp. 74-84) also give substance to the material being discussed. Two murals, specifically, include representations of the *sipápuni* , once again described by Waters as the place of emergence.

Part Three is entitled, "The Mystery Plays: The Ceremonial Cycle." The first ceremony discussed in depth in this section is the Wúwuchim ceremony. Waters begins by explaining its meaning and significance. He writes: "The singular for of the word, Wuchim, is etymologically derived from *wu* , to germinate, and *chim* , to manifest." Wúwuchim is the religious ceremony in which Hopi Wuchim engage in the active process of assuring the continued "germination of life on earth--plant, animal and man (p. 137)."

Waters reviews the many rituals and practices involved in the ceremony. Included, even highlighted, in this discussion is the process of reproduction of the society through initiation practices. A central event in this process is the Night of the Washing of the Hair, which, Waters marvels, is so thoroughly infused with an air of sacredness and secrecy. The author explains that the initiates "are young men, adults, who are now inducted into a higher stage of spiritual training." He elaborates on the ceremony's meaning, stating that "they [the initiates] symbolize the first human beings emerging upon this new world at the dawn of Creation (p. 143)." The events of the ritual are presented in much detail, culminating with this description (p. 146):

> Naked and wet as infants just born into this new world, the initiates are taken to a nearby home, where the kiva chiefs wash their hair in nine successive bowls of yucca suds. The nine bowls represent the seven successive universes through which they will travel on their evolutionary journey, the domain of Sótuknang who helped to establish them, and the realm of the Creator, Taiowa, who rules over all. The initiates are then taken back to their own kivas by their godfathers.
>
> This Washing of the Hair does not complete their initiation. Late in the spring each initiate is required to make a pilgrimage to the Salt Cave in Grand Canyon, testing his spiritual wings for the first time.

An important supplement to this reference to the pilgrimage for salt is included in a footnote on the same page in which Waters writes:

> Initiates on First and Second Mesa go to Salt Lake below Zuñi, the initiates on third Mesa making the more difficult, ninety-mile pilgrimage on foot to Grand Canyon and bringing back a heavy gift of salt for their sponsoring godmothers. The last pilgrimage was made in 1957, and I am told that hardship is so great that few young men now make the trip. Those who do not go always remain young hawk fledglings too spiritually weak to fly.

The final section of this book, "Part Four. The History: The Lost White Brother," looks at the extensive history of the Hopis in the Painted Desert region of present-day Arizona. He notes the process of exploration and encroachment by Spaniards, Americans, and Navajos on traditional Hopi lands. He traces the disintegration of some Hopi practices, the changing policies of the United States Government, the split at Oraibi, and much more.

Watson, James B.
1943 How the Hopi Classify their Foods. *Plateau* 15(4):49-52.

Watson (p. 49) notes that the Hopi word for salt is "*uh:nga*." Salt is a member of a class of foods termed "*uh:ngála*," which Watson says are or were in the past more scarce than the staples in Hopi diet. He states (p. 50), "There can be no doubt as to the gustatory function of salt in Hopi or any diet, and the partial phonetic identity between *uh:nga* and *uh:ngála* seems, therefore, more than accidental." *Uh:ngála* foods are items that are scarce, hard-to-get, or "costly," and which are not consumed in large quantities at any given time.

Weinburg, Frances Toor

1922 *Relations of the Spaniards with the Moquis 1540 - 1780.* M.A. thesis, University of California, Berkeley.

This thesis includes transcriptions of a number of Spanish documents, preceded by a general discussion of the subject indicated in the title. One of the documents Weinburg translates is "Diary of Entrada to Moqui, June 1775, with letter to Minister Provincial, Fray Ysidro Murrillo, Apr. 30, 1776, by Fray Silvestre V. Escalante."

While at Hopi, Escalante obtained information concerning the Cosninas (Havasupai). Escalante relates that there were two Havasupai Indians present at Walpi during his visit to that village. As translated by Weinburg (pp. 48-49), Escalante describes that while he was at Oraibi,

> I was going in search of some Cosninas in order to get information of their land and to learn if I could go there along with them. And, having learned that even the two who were in Gualpi the day I arrived had already departed from Moqui for Cashuala, which is their land, I charged the interpreter that if anyone of their relations or friends had any knowledge of the place and of the road, to try and bring him to me with caution, in order to inform me of it. He brought his uncle, saying this one had gone many times to Cosnina and that he would tell me better than anyone else as much as he knew. In fact, his words and countenance denoted that a good soul had fallen to his lot, and assured the truth of what he was able to submit. At the same time I was questioning him, there approached one to the house where I was lodging, and hesitating to continue lest the other (one approaching) should hear him, the very one whom he feared encouraged him, saying now the two were alone and that there was no one to denounce them, that he too knew the land and wished to please me by answering whatever I might ask him. Thereupon the two gave me an extensive report of everything.

Escalante thus provides evidence that in 1775 the "road" to Cataract Canyon where the Havasupai dwelled was well-known by the Hopis, and that both Havasupais and Hopis visited each other's settlements on a regular basis.

Wheeler, George M.

1875 *Report upon United States Geographical Surveys West of the One Hundredth Meridian,* Vol. 3--Geology. Government Printing Office, Washington, DC.

In the 1873 season of George M. Wheeler's survey of the territories west of the one hundredth Meridian, Dr. Oscar Loew discovered a naturally-formed salt deposit near Sunset Crossing on the Little Colorado River while exploring Hopi territory (p. 628).

Wheeler, George M.

1879 *Report upon United States Geographical Surveys West of the One Hundredth Meridian,* Vol. 7--Archaeology. Government Printing Office, Washington, DC.

During George M. Wheeler's survey of the territories west of the one hundredth Meridian, members of the survey recorded information about Native Americans living throughout the area. Volume 7 is dedicated to the documentation of all archaeological and ethnographic material from the survey.

During the 1873 season, members of the survey visited the Hopi Mesas (pp. 388, 405). A Mr. Gibbons reported that while there, he observed Hopis sitting on their roof tops, "looking to the east at sunrise" (p. 321). One Lieutenant Russell collected a Kachina doll from the Hopi during his visit of 1873 (p. 388). Dr. Oscar Loew also visited Hopiland during this year and reported that a total of six villages existed at the Hopi Mesas (p. 340,405).

Whiteley, Peter

1988 *Deliberate Acts.* University of Arizona Press, Tucson.

Whiteley begins his preface with the remark (p. xv), "It's pretty tough to write about the Hopi these days ... Hopis are intrinsically suspicious of anthropologists as people who pry too much, reveal cultural secrets, and make a living by exploiting Hopi culture."

He adds (pp. xv-xvi), "The communication of knowledge in Hopi society is not an open free-for-all; much knowledge is privileged and valuable, and the average citizen does not have rights of access. Some forms of knowledge, especially pertaining to ritual, are highly sensitive and should never be discussed publicly (anthropologists have largely ignored this, of course)."

Little archaeological research has been conducted at Oraibi (p. 11) "... because the pueblo has been unwilling to have its cultural privacy invaded by those whose sense of history is incompatible with ancestral sanctity."

Whiteley concludes a discussion of Hopi clans at Oraibi by noting (p. 53),

> Mythological history and its reenactment in ritual or its reiteration in tradition constitute crucial features of clan identity in Hopi thought. Clan traditions are matters of continuous intraclan discourse that repeatedly reaffirm marks of distinction. Such marks occupy manifold frames of reference: mythico-historical, theological, ritual, geographical, archaeological, botanical, zoological, meteorological, and so forth. In short, clans in Hopi thought are cosmological, not simply sociological, entities.

In discussing the structure and sociology of Hopi knowledge, Whiteley notes (p. 255),

> *Hopinavoti* is the general category of Hopi ideation that provides thoroughgoing analyses that are comparable to anthropological analyses, in that they stem from a demarcated tradition of interpretation that is specialized, restricted, and "expert." *Navoti* indicates a system of knowledge that includes philosophy, science, and theology and incorporates conceptual models for explaining the past and predicting, or "prophesying," future events ... in short, it is a sort of Hopi hermeneutics. The predictive element and the temporal connection between cause and effect mean that present conditions can be explained by reference to past predictions and that future events will in some way reflect contemporary "prophecy"—a term used for *navoti* in Hopi English ("theory" is another).

He notes that *sikavungsinom* are regarded as having a shallower understanding of *Hopinavoti* than *pavansinom.* Hopi knowledge can be portrayed (p. 255) "... as a series of concentric rings marking boundaries of secrecy between circles of knowledge ..." that

separate common people from religious leaders with access to powerful and esoteric information. Whiteley notes, (p. 265), "Since knowledge in Hopi society is the currency of power and is closely guarded in secrecy, it follows that the political decision-making process—the actions of knowledge-holders—is a secretive, conspiratorial affair."

Whitely observes (p. 272), "... historical interpretation gives events more order than the experience of them."

Whiteley points out that (p. 273), "... a ceremony's decline is not an abrupt, cut-and-dried affair. Minor, individual observances may continue long after the main performance has ceased." In this regard, he notes that Oraibi's last *Wuwtsim* initiations were held in 1909, the year of the second Oraibi split, but that the more general *Wuwtsim* ceremonies seem to have declined more gradually with some component groups still active in the 1920s.

Whiteley undertakes a detailed description and analysis of the Oraibi splits in 1906 and 1909 that led to the formation of five new villages on Third Mesa. He provides an authoritative account based on extensive archival research and interviews with Hopi people as well as review of previous anthropological literature. Whiteley considers the social, cultural, political, and ritual implications of the deliberate acts that led to the reorganization of Hopi society on Third Mesa.

Whiteley, Peter

1988 *Bacavi, Journey to Reed Springs.* Northland Press, Flagstaff, Arizona.

This narrative history of the Third Mesa village of Bacavi was written for a general audience. Chapter 2 (pp. 7-13) provides an account of the origin and migration of Hopi people that led to the founding of Oraibi.

In recounting the history of the Spanish entrada of 1540 that resulted in García López de Cárdenas' journey to the Grand Canyon, Whiteley (p. 17) notes the Hopi name for the Grand Canyon is Öngtupka, meaning "Salt Canyon."

Whiteley notes that after the construction of a Catholic mission at Oraibi, the Spanish priests demanded the Oraibis obtain drinking water for them from Moencopi because they were not satisfied with the water on Third Mesa.

Young men are initiated when *Natnga* was held as part of the *Wuwtsim* ceremonies that were formerly held annually (p. 22).

Whiteley's narrative explains the events that led to the founding of Bacavi and describes its subsequent ritual, social, political, cultural and economic development.

Whiteley, Peter

1989 Summary of Opinions and Conclusions Regarding the History of Hopi-Navajo Relations. Plaintiff's Exhibit No. 711 in Vernon Masayesva, etc. Plaintiff, v. Leonard Haskie, etc., Defendant, v. Evelyn James, etc., Intervenor, Civil No. 74-842 PHX-EHC, United States District Court for the District of Arizona.

Whiteley (p. 1) argues that the Hopi perspective on land use in the area subject to litigation can not be understood unless the history of Hopi-Navajo relations is considered, including (1) the movement of Navajo into the area, (2) the nature of relations between the two peoples, and (3) Navajo population expansion.

When the Navajo migrated into the Southwest, probably about AD 1400, they were not ethnically distinct from other Apachean people (pp. 1-2). The first mention of Navajos as an ethnically distinct people was in 1626. The life-style of the Navajos became more sedentary after they acquired agriculture from contact with the Pueblo Indians.

Whiteley states (pp. 2-3), "Major changes occurred in Navajo society and culture as a result of borrowing from Pueblo peoples. In particular, following the Pueblo Revolt of 1680, it is likely that the Navajo acquired the following specific features from Pueblo refugees: matrilineal clans, an emergence mythology, four-directional gods (and hence a concern with sacred mountains),and sand-painting, kachina-style masked-god impersonation, weaving, and animal husbandry. The addition of horses, acquired by raiding, greatly improved Navajo mobility and military capability."

Under military pressure from Utes, Comanches, and Spaniards, the Navajos were forced to abandon Dihnetah, their original area of settlement (pp. 3-4). The moved to Mt. Taylor, the Chuska Mountains, and Canyon DeChelly. Reports of Navajos raiding Hopi villages begin in the 1770s but at this time the Navajos still lived in the area far to the east. The earliest report of Navajos living at Black Mesa is in 1819.

Navajo mobility was high (pp. 4-5). Navajo raids on the Hopis and other pueblos were serious and persisted after the United States assumed control of the Southwest in 1848. During the 1863-1864 campaign to round-up the Navajo, some Navajos fled to and settled in the area west of the Hopi villages. After the establishment of the 1868 Navajo Reservation, economic conditions and population growth led to further Navajo settlement in the 1934 area. The Navajos were recent immigrants to the area compared to the Hopis and Paiutes who had been there for a much longer period.

Whiteley states, "Navajo expropriation of Hopi property and territory proceeded by systematic aggression that amounts to territorial expansion through conquest." Whiteley opines that governmental agents were intimidated by Navajo pressure into recommending or adopting policies prejudicial to Hopi interests.

Whiteley (pp. 8-9) opines that Navajo religious practices focus on individual health and well-being in contrast to Hopi religion which is concerned with environmental harmony. Navajo sacred sites are characterized by multiplication, replication, and shifting

locations of key conceptual features (e.g., "four sacred mountains"). Hopi sacred sites are more fixed and entrenched in the landscape. Whitely (pp. 10-11) concludes "The proliferation and replication of Navajo sacred places reflect a cosmology that is malleable and adapted to changing environments that Navajos have moved through."

Hopi characterization of Navajos "... as aggressive, overbearing, mendacious, and thieving" are apparent in conversation, dramatized forms of public rituals, and in the documentary record (p. 12).

Whiteley concludes (p. 14), "Hopis are long-term occupants of the 1934 area. Navajos are recent arrivals who, in the Hopi view, have usurped Hopi rights."

Whiteley, Peter M.

1989 Hopitutskwa: An Historical and Cultural Interpretation of the Hopi Traditional Land Claim. Ms. on file at Hopi Cultural Preservation Office, Kykotsmovi, Arizona.

"*Hopitutskwa* means 'Hopi land'" (p. 1). Whiteley provides a well-researched and significant historical overview of the Hopi concept of Tutskwa. As he states (p. 1), "The continuity of these concepts, despite more than one hundred years of acculturative pressure from the dominant society, is a powerful testament to their fundamental entrenchment in Hopi interpretations of their relationship to and emplacement within the land."

Whiteley's thesis is eloquently supported by many important quotations from Hopi leaders and officials of the United States government. This annotation concentrates the opinions and conclusions Whiteley draws from this material rather than the primary sources themselves.

Whiteley notes (p. 2),

> A series of shrines marks the borders of *Hopitutskwa*. Through the historical record, the places named do not always coincide exactly, but there is a very high degree of coincidence over their general areas. The lack of absolute coincidence is of little significance here. Different clans have different shrines which they would emphasize differently from other clans ...
>
> Further, the synecdochic usage of some place names to refer both to a specific place and a general area (just like English place-name usage) also results in some minor differences. For example, Tokonavi is both a general term for the Navajo Mountain area and a specific term for an old village close to the confluence of the Colorado and San Juan Rivers. Also, exact locations have often proven difficult to identify, because many outlying markers are shrines; while critically interested in preserving their use and occupancy rights, Hopis have always been very reluctant to reveal precise shrine locations ... Fundamental precepts of secrecy in Hopi religious practice prescribe severe social and supernatural sanctions for any breaches ...

Whiteley observes (p. 4), "Linking trajectories between points very probably follow natural topographic boundaries, like rivers and cliff rims; in some cases these are well known, like the Colorado River, in other cases fairly easily inferable from the topography. My interpretation is that, in Hopi thinking, connections between marked places would follow natural features associated with religico-ecological resources, rather than straight lines."

Whiteley reviews the shrines that demarcate the Hopitutskwa, providing English gloss for Hopi words. He notes Pisivayu (Colorado River) possible means "river between

canyon walls;" Koonihahawpi means "Havasupai descent trail;", Tusatsomo means "grass hill;" Hoonawpa means "Bear Springs;" Yotsi'hahawpi means "Apache descent trail;" Sakwavayu means "blue river;" Tsimontukwi means "jimsonweed bluff;" and Namituyqa means "bluffs facing each other" (pp.4-5). He notes that the shrine "Potavetaqa" means "migration-spiral symbol place," and that this place is close to Kooninhahawpi (p. 5).

There is a long historicity to the Hopi claims to Hopitutskwa, documented both in expressions asserting use and occupancy rights and in expressions of the land itself (p. 7). Whitely (pp. 7-39) reviews the historical evidence for Hopi land claims beginning with an 1819 visit of Hopis to Santa Fe and continuing through the twentieth century.

Whiteley (p. 11) observes that the "Hopi claim to the *tutskwa* is intimately associated with religious mythology." He then reviews how the Hopi's acquired their land rights from the Hopi deity Maasaw.

The historical record documents that the Hopis opposed the allotment of their land under the provisions of the Dawes Allotment Act, as well as incursions by Navajos (pp. 14-16).

The Hopi clan migration traditions state the "Hopis migrated from all directions in to Tuuwanasavi ("earth center"), where the present villages are located (p. 16).

Whiteley presents evidence that the Hopis had historical ties, knew about, and used land beyond the boundary shrines of *Hopitutskwa* (pp. 40-49). This land use is evidence by traditional migration histories, physical trails, trading relationships, and procurement of natural resources (e.g., plant dyes, mineral pigments). As Whiteley concludes, "In summary, any notion that the tutskwa includes the widest extent of habitual Hopi usage of the environment. let alone Hopi knowledge of geographic limits, either prehistorically, historically, or at present, is simply not credible."

Whiteley addresses the cultural meaning of the Tutskwa (pp. 50-58). He notes (p. 50), "Tutskwa i'gatsi -- "land and life" -- go together in Hopi thought. The mythological granting of permission for Hopis to use the tutskwa by the deity Maasaw combined the land with its life resources, from which the Hopis would gain their sustenance, and towards which they assumed responsibility to reciprocally sustain ..."

Whiteley (p. 50) adds that the since the Hopis have "... an eternally binding, sacred obligation to take care of it for the supernatural owner" tutskwa is not reducible to "real estate." Residence, ancestral connections, and religious beliefs form a strong bond between the Hopi and their land. As Whiteley observes (p. 51), "Interdependencies between humans and other species pervade Hopi thought and practice." This is evidence by the Hopi clan *wu'uya* (totems). In addition, "For Hopi, there is a fundamental connection between the organization of nature in the landscape and the organization of society: the conceptual arrangement of the cosmos is reflected in the conceptual arrangement of society."

Whiteley notes (p. 54), "A fundamental principle of Hopi metaphysics is that human thoughts and intentions produce direct effects in the environment. The environment is charged with other intentional beings, natural and supernatural, susceptible to communication and petition if properly addressed. Human beings, then, take responsibility for ecological events." He concludes (p. 55), "In short, since human thought and action directly affect the environment, Hopi moral principles are addressed not just to interpersonal relations but also to interspecific relations. The result is a moral ecology and an ecological morality."

The landscape is critically important. Whiteley points out (pp. 55-56),

> Hopis consider themselves centered in this particular landscape. The particularity of the tutskwa landscape as the Hopi destiny appears repeatedly in clan migration legends, ritual practices, and tribal traditions. Being Hopi in a cultural sense veritably demands emplacement within this landscape. In the absence of writing, the landscape itself serves as the repository of many traditional associations ... Because of the sheer length of Hopi occupancy, then, many names in the landscape call forth deep historical associations, implanting Hopi traditional knowledge itself within a topographic matrix.

Whiteley concludes, "The entire Hopi ritual structure is dependent on emplacement within the particular landscape, ecology, and meteorology with its seasonal variations -- as are the ritual systems of other Pueblo societies. Hopi rituals would be meaningless outside this environment ..." [emphasis in original].

Whiteley notes (p. 58), "It is difficult The religious aspects of Hopi relationships to their environment because of institutionalized secrecy in such matters ... In particular, traditions associated with tuutuskya, shrines, including those marking tutskwa boundaries, are inadequately known, because songs and sacred narrative which record specific associations occur in private rituals." When outsiders are made privy to Hopi esoteric knowledge, the "sheer complexity of Hopi ritualism, lengths and numbers of songs and narratives, etc. has often proved baffling."

Religious pilgrimages to outlying sacred sites "provide 'electrical' conduits to the shrine, retrieving its associated power and connecting it into the village centers" (p. 63). Whitely elaborates by stating (p. 63),

> Thus, the bringing of power from the outlying shrine is both symbolic and actual. The clan migration route is both acted out in symbolic drama in the village and in the actual revisiting of points along the route. Clan ruins and other outlying shrines are both commemorated and drawn upon for their resources, natural (i.e., gathered products) and supernatural. Ancestral spirits at the shrines are renewed and propitiated in their local capacity as guardians of the tutskwa boundaries.

Regular journeys throughout the *tutskwa* are necessary to procure ritual materials, i.e., spring water, pine, spruce, cottonwood, turtles, eagles, pigments, etc. (p. 66).

Whiteley observes that (p. 66), "Some Hopi religious practices have ceased during the twentieth century, but since some have been subsequently revitalized, it is not possible to determine whether in particular cases a demise has been final." He adds that (p. 67), "The diminution of some religious practices does not, however, materially affect the religious relationship to the environment."

Whiteley explains that (p. 68) "Kachinas are thus multiform characterizations, again linking representations of environment and society, since they embody both natural features and moral qualities associated with the most desired forms of Hopi behavior." He notes, "From July to December the Kachinas live at the outlying shrines around the tutskwa boundaries."

The gathering of eagles is a religious use of *tutskwa* that links the Hopi people to their land (p. 69). Eagle feathers "have multiple ceremonial uses, and form a central means of communication with deities ..." (p. 69). Whiteley explains (p. 69)

> ... an Eagle clan leader stated in 1981, "eagles are our life-line." For his meaning, the association between the dead and the living (above) is important as well as the exceptional way in which eagles are conceptualized in Hopi culture. After they are captured, eagles are treated as human beings; young eagles are felt to be Hopi ancestors reincarnated. they are, accordingly, baptized and named, just like human babies; given children's gifts; and finally formally buried in a special eagle cemetery at the outskirts of each village. While many interactions with natural species contain ritual, no other species is treated in this way as human beings.

Whiteley notes that eagles are considered to be ancestors. This gives them a proprietary rather than general interest in eagles. The Hopis believe that eagles are guardians of the *tutskwa* boundaries, "... in that they dwell near clan ruins, from where they watch over their Hopi descendants -- just as, when captured and tethered on the rooftops, they watch more closely over the villagers and judge whether they are living properly" (p.71).

The persistence of Hopi eagle gathering (p. 74) "attests to the vital role this religious activity plays in Hopi culture. Its explicit association with the tutskwa boundaries, through the equation of eagles and living embodiments of clan ancestors at established clan ruins, makes this practice of particular importance ..."

Whiteley argues that conservation is central in the Hopi relations to their environment (pp. 75-83). The "economic" use of the environment cannot be divorced from "religious" use. All human action has a reciprocity with the environment, i.e., with *Hopitutskwa*.

Whiteley, Peter

1993 The End of Anthropology (at Hopi)? *Journal of the Southwest* 35(2):125-157.

This essay analyzes the uses and abuses of anthropological research at Hopi. In regards to a study of the Hopi salt pilgrimage by a professor from Northern Arizona University, Whitely quotes a speech made by Tribal Chairman Vernon Masayesva. Masayesva says (p. 140),

> I learned that [the] university could not take action on my complaint since the research was protected by a sacred university tradition called "academic freedom." It is this type of research that is causing many Hopis to pressure the Hopi Tribal Council to enact an ordinance prohibiting *all* future research activities on the Hopi Reservation ... Although the [Salt Trail] research wears the cloak of scholarly enterprise, its publication denotes to us a lack of sensitivity to our religious values and the way we organize and conceptualize our sacred traditions. Research needs to be based on the reality of our existence *as we experience it*, not just from the narrow and limited view American universities carried over from the German research tradition.

A. F. Whiting
n.d. Whiting Collection, Cline Library Special Collection, Northern Arizona University.

The Whiting Collection housed at Special Collections at the Cline Library, Northern Arizona University, consists of original field notes, manuscripts, and a substantial amount of miscellaneous notes taken from the publications of other scholars. Although Whiting specialized in ethnobotony and textiles, he had a very wide range of interests and all of these are represented in the Whiting Collection. The following notes are relevant to the Hopi GCES Project.

Hopi, Volume 1, Arts and Crafts 1

p. 28, "Punishment for person previously married - for marrying an unmarried partner - n afterlife has to carry heavy burden basket." (hoapu)

"From grave to land of the dead, such person called - Basket carrier [In route to be carried on back.]"

"Basket made by previous mate - who loads it with lumps of gravel." [*hoa pe qwil*]

p. 29, carrying basket in afterworld, *kalavi; kalapi*

p. 93, "Marriage essential to secure objects necessary for passage at death to afterworld." Females need wedding robe (*o'va*) ; males need wedding plaque (*Kwiu ca'unvi*).

Hopi, Volume 29, Geography 1

p. 22, "big canyon, Grand Canyon = "wu:ko tipqa"

p. 110, "Quoichongva: three kinds of paint they used to get from Supai. Red: a su'ta, copper: sa kwa. They got from Supai in trade & a yellow clay from near salt mine: pa vi sa." Note from 2/25/42.

p.127, notes from Talayesva, *Sun Chief*, also from Fewkes 1900 on salt icicles and Hough 190?, on glander salt, mirabilite, salt flower,

Hopi Volume 31, Geography 3

p. 19. yellow ochre, *sikya'tska*

Whorf/Stephen 1936, p. 1294

obtained in spring in bottom of Grand Canyon 497-8.

Whiting, Alfred F.

1939 *Ethnobotany of the Hopi.* Museum of Northern Arizona Bulletin 15. Northern Arizona Society of Science and Art, Flagstaff, Arizona.

This classic work in ethnobotany analyzes the importance of plants to the Hopi people. Information about the use of many specific plants is provided in chapters dealing with agriculture; wild plants used for food; plants used for construction, implements and decoration; Hopi medicinal plants; plants of ceremonial and magical importance; and plant symbols in social and ceremonial life.

Whiting (1939::48) describes over 100 plants with Hopi names and uses. Many of these plants are used for more than one purpose. Whiting's ethnobotany includes: 40 cultivated plants; 10 semi-cultivated plants; 54 wild plants used for food; 47 plants used for construction, implements, and decoration; 65 medicinal plants; 37 ceremonial and magical plants; and 45 plants used symbolically.

The following information on the Hopi attitude towards nature, as told to M. R. F. Colton, is provided (p. 6).

> To the Hopi all life is one. All the animals, birds, insects, and every living creature, including the trees and plants, in the forms in which we ordinarily see them, appear only in masquerade, for, as the Hopi say, all these creatures that share the spark of life with us humans, surely have other homes where they live in human form. Therefore, all these living things are through of as human and, may sometimes be seen in their own forms. When one of them is killed, its soul must return to its own world which it may never leave again, leaving behind it descendants which will take its place in the human world, generation after generation.

Hopi hunters carry *pahos* for the game animals they hunt. Whenever a Hopi gathers a particular type of plant a prayer offering is placed beside it to carry a message of the Hopi's need to other plants. The Hopi then finds another plant of the same species to collect (p. 7).

Whiting (p. 19) notes that before the coming of the trader salt could only be obtained with great difficulty so several wild plants with salt flavors were used in seasoning food.

Whiting (p. 39) observes that smoking among the Hopi is primarily a ritual activity. He says, "The chief object seems to be to produce a 'cloud' which, because of its fragrance, will attract the attention of the heavenly powers who controlled the rain bringing clouds upon which so much of Hopi life depends." Two species of Native tobacco (*Nicotiana attenulata; Nicotiana trigonophylla*) are smoked, sometimes in a mixture with other plants such as cotton, spruce, pine, and aspen.

Many plants are used in Hopi rituals as symbols. Plants that grow in or next to water, e.g., rushes, cottonwood, willows, sedge, and cattail symbolize water (p. 43). The symbol of the One Horned Society is a stalk of agave. A mat of raw cotton is placed over the face of the dead as a symbol that the deceased has become a cloud (p. 44).

The ceremonial prayer stick, or *paho*, is important in Hopi ritual (p. 44). There are many different kinds of *paho* with special significance but they usually consist of a stick to which feathers and various other objects are attached by hand spun cotton.

Whiting notes the association of colors with cardinal directions is one of the fundamental patterns of Hopi ritual symbolism (pp. 44-45). He gives the following associations: northwest with yellow; southwest with blue or green; southeast with red; northeast with white; zenith with black; and nadir with all colors or gray.

Many Hopi clans are named after plants (pp. 47-48), e.g., Reed, Greasewood, Agave, Juniper Pinyon, White fir; Cottonwood, Douglas fir, Oak, Tansy Mustard, Tobacco, Mariposa lily, Painted cup, Thistle, Squash, Larkspur, Gilia, Prickly pear, Cholla, Rabbitbrush, and Corn.

Many plants are obtained from distances of eighty miles or more (p. 49). Whiting observes that Agave is not found in the Hopi country and is obtained by trading with the Havasupai.

The use of cattails (*Typha angustifolia L.*), called *wi'po* in Hopi, is described as (p. 64), "The mature heads are chewed with tallow as gum, and the children chew the stems as children elsewhere chew sugar cane. It is a common present given to children at kachina dances. Ceremonially it is important as a plant associated with water.

Whiting (p. 71) says *Kwa:'ni* or Agave reached the Hopi through trade with the Havasupai of the Grand Canyon. The baked leaves are used as food and drink. The stalk is used as a ritual symbol.

Wiget, Andrew
1982 Truth and the Hopi: An Historiographic Study of Documented Oral Tradition Concerning the Coming of the Spanish. *Ethnohistory* 29:181-199.

Wiget's article is similar to Eggan's (1967) "From History to Myth" in that it evaluates the historical accuracy of Hopi traditions by comparing oral "testimonies" with independent sources of data. Like Eggan, Wiget finds Hopi traditions to be very accurate in portraying the general motivational and causal patterns underlying the events in question, as well as specific historical details.

The Hopi traditions Wiget investigates are those concerning the coming of the Spaniards to Hopi and the Pueblo Revolt. The oral accounts are derived from published sources, and from interview transcripts from the Doris Duke Oral History Project archived at the University of Utah Marriott Library.

Of interest to the Hopi GCES is one element of the traditional accounts describing the behavior of Spanish priests at Oraibi. As Wiget (p. 185) summarizes:

> The priests began to send the Hopi off the mesa westward for water, either to Moencopi ... or the Little Colorado River ... The Hopi tired of this quickly and instead got water at a spring near the sun shrine three miles southeast of the village ... (P) does not mention this digression, nor the Hopi solution of building cisterns to avoid being sent for water. (P) sees this whole practice as a deliberate ruse on the part of the priests to separate their husbands and fathers from their families, thus permitting the priests free access to illicit affairs with the women. (W) does not mention any such tactic, but agrees the priests were after the woman.

This is of interest since a similar account was collected from Walter Hamana during a GCES interview which tells of the Spanish priests sending Hopis to the Grand Canyon to get water.

Wiget uses the documentary history of excessive and brutal Spanish behavior in New Mexico to evaluate charges of similar behavior in Hopi accounts, and finds that such behavior did occur (i.e., disruption of the Hopi social, physical and spiritual environments through the abuse of women, the cutting of timber, and an assault on the kachina religion). Wiget thinks this indicates the motivational and causal patterns in the Hopi accounts of the Pueblo Revolt are therefore accurate. The accuracy in details and in the sequence of events of the Pueblo Revolt are tested using historical accounts and calculations of the lunar calendar, and Wiget finds these details historically accurate as well.

Wiget (p. 196) finds that some confusion is evident in Hopi traditions, "especially as less reliable, more contemporary sources are used." He thinks this lack of reliability "probably does not result simply from the passage of time, but from the interviewee's lack of qualification as a legitimate bearer of tribal history."

Wiget (p. 196) posits the Hopi philosophy of history is "a religious one, deeply imbued with the consciousness of the physical world as living entity in which man not only 'positively affects the functioning of the external world of nature to a limited extent, but that in the measure he fails to do so, the harmonious functioning of the universe will be impaired' (Thompson 1945:541)." Wiget suggests that any notion of motivation is reflected as principles of causality in narrative. He (p. 196) thinks that what Western historians perceive as a shift from history to myth is really,

> ... a communal attempt to make discrete, personal events culturally meaningful to make the experiences of a few the public domain ... By the same token even an individual's most private experiences are understood by the person experiencing them in reference to the cultural matrix of conventional symbolic references in which things 'make sense.'

Wiget concludes that his study demonstrates that the kind of information valued by Western historians can be found in oral tradition. Rather than view the public records embedded in oral narratives as "distorted," Wiget thinks we need to address the "metahistorical framework" which supports these narratives. He states, "Only then might one understand the cultural concept of historical significance, and so avoid the reduction of some elements to literalness and the elevation of others to myth. That way one might rescue from the distortion of Western categories the truth of the Hopi."

Wilson, Iris Higbie

1965 *William Wolfskill, 1798-1866.* Arthur H. Clark Company, Glendale, California.

In 1826 William Wolfskill was hired by Ewing Young to take charge of a fur trapping expedition in New Mexico. George Yount was also a member of this expedition, as were ten other trappers. Wilson adds (p. 50),

> In addition they were joined by a party of five trappers which had been organized by Thomas L. Smith, later known in California as "Peg Leg Smith," and a Frenchman by the name of Maurice Le Duc. These two adventurers had explored a large area of central Utah, had their horses stolen by Ute Indians, fled across the San Juan into Arizona and finally ended up by spending several days with the Moqui Indians near the Little Colorado River before returning to Taos.

Winslowe, John R. (pseudonym of Gladwell Richardson)
1969 Ancient Salt Trails. *True West,* August, pp. 26-29, 42.

While this article is based on fact it also contains a certain amount of hyperbole. Some of the material is drawn from Gladwell Richardson's personal observations when he worked at the Houck Trading Post around 1919. Most of the article describes Hopi salt pilgrimages to Zuni Salt Lake. These particular salt expeditions were not directly associated with the Wuwtcim initiation and they incorporated trading at Zuni Pueblo and various trading posts along the trail.

While not precisely accurate, Richardson (p. 26) states that the Oraibi Hopis also "... journeyed west to mine salt in the Little Colorado River canyon where it joins the big Colorado." He includes photographs of the Little Colorado River gorge and Tutuveni in the article (p. 29). The caption for the photograph of Tutuveni states, "The salt trails went into the Little Colorado River Canyon and cut their clan symbols on the rocks at Willow Springs."

While no dates are provided in this article, other publications of Gladwell Richardson make it clear he is describing the early twentieth century. He notes (p. 28) that the men of Moencopi "... were not then using the western trail to the mines at the junction of the Colorado Rivers." Of the western trail, he says (p. 29),

> The western salt trail formerly used by the Oraibians was even more fraught with disaster than the trail to Zuni. It passed, southwest across the Denehbetoh Valley, crossed Hopi Mesa to Clan Rocks, thence via Bodeway Mesa into the Little Colorado River canyon. It was all hot, dry desert to Clan Rocks at Willow Springs. To make this leg of the return journey woven willow water bottles covered with piñon pitch were buried along the route going out. Picked up the return, this supply enabled them to negotiate the waterless desert to Oraibi.
>
> Willow Springs provided a good water supply. While resting over there, going and coming, the Hopis carved their clan symbols on the great blocks of red sandstone. These petroglyphs remain there today, avidly photographed by tourists on U. S. Highway 89. Even though most are centuries old, they can be readily identified as clan symbols.
>
> The western salt trail was also subject to the rigors of climatic conditions, but even worse were the sudden attacks by roving bands of Havasupai, Piute, Ute, and Navajo Indians. For this reason, beginning about 1885, expeditions to the Little Colorado were slowly abandoned. Finally all Hopi salt trains were diverted to Zuni in New Mexico. On this long trail the Navajo and Apaches attacks ended shortly before 1900. No one bothered the Hopis and they faced only heat and cold and storms.

Winship, George Parker (translator and editor)
1922 *The Journey of Coronado, 1540-1542, From the City of Mexico to the Grand Canon of the Colorado and the Buffalo Plains of Texas, Kansas and Nebraska; As Told by Himself and His Followers.* Allterton, New York. [Reprint of a work originally published in 1896].

Chapter 11 provides the history of how Coronado sent Don Pedro de Tovar from the Zuni Pueblos to the Hopi Mesas in 1540 (pp. 32-37). After hearing about the Grand Canyon from the Hopis, Tovar returned to the Zuni Pueblos. Don Garcia Lopez de Cardenas and twelve companions were subsequently dispatched to Tusayan where the Hopis guided them to the Grand Canyon. The Spaniards attempted but failed to reach the Colorado River in the bottom of the Grand Canyon.

Winship reports the Spaniards traveled for twenty days to reach the Grand Canyon from Hopi (p. 35) from Hopi. They spend three days on the south rim looking for a passage to the river but found it impossible to descend. Captain Malgosa, Juan Galeras and a third Spaniard attempted to hike to the bottom but returned after only hiking a third of the way to the river. While at the Grand Canyon the Spaniards had to travel a league or two inland every day in order to find water. The Hopis advised them that they could not go further because there was no water. The Spaniards report that when the Hopis (p. 37), "... travel across this region themselves they take with them women loaded with water in gourds and bury the gourds of water along the way, to use when they return, and besides this, they travel in one day over what it takes us two days to accomplish."

Winship's map of the Spaniard's route (see figure below) shows them crossing the Little Colorado and approaching the south rim in the vicinity of what is now Grand Canyon village.

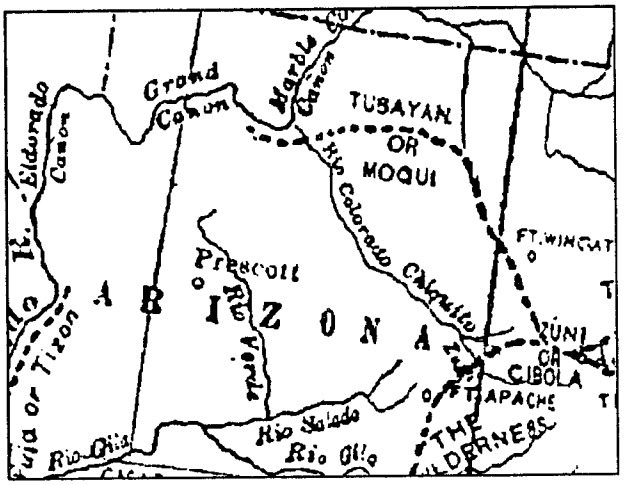


Figure: Detail of Winship's map depicting "The Route of Coronado" from Cibola to Tusayan and the Grand Canyon.

Winship, George Parker (translator and editor)

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Wray, Jacilee

1990 *Havasupai Ethnohistory on the South Rim of the Grand Canyon National Park: A Case Study for Cultural Resource Management in the National Park Service.* M.A. thesis, Department of Anthropology, Northern Arizona University, Flagstaff.

Wray (p. 42-43) presents the following information about the "Moqui Trail" to the Havasupai.

> The Moqui Trail, which was the trade route between the Hopi Mesas and Havasu Canyon, was mostly abandoned by 1910. The trail led down Little Jim Canyon, past a cave which was used by Havasupai hunting parties, and then out onto the Cataract Plain to Havasu Canyon ...

Yamada, George
1957 *The Great Resistance.* Privately published, New York.

This is a privately published collection of "traditionalist" writings about the Hopi, including copies of letters from Hopi leaders to U. S. officials, statements by Hopis, reprinted news articles, and essays by non-Indians. Most of the tract concerns Hopi tribal sovereignty and land problems.

Yamada quotes a letter written by the "traditionalist" chiefs to the President of the United States that says (p. 2),

> This land is a sacred home of the Hopi people and all the Indian race on this land. The boundaries of our land were established permanently and was written upon Stone Tablets which are still with us. It was given to the Hopi people the task to guard this land not by force of arms, not by killing, not by confiscating property of others, but by humble prayers, by obedience to our traditional and religious instructions, and by being faithful to our Great Spirit, Massau'u.

Yamada states the 1955 "Hopi Hearings" grew out of a meeting held with the Commissioner of Indian Affairs on March 18, 1955, in Washington at which Dan Katchongva, David Monongye, and several others complained about temporary grazing permits and other issues of land and governance.

A statement by Dan Katchongva (p. 40) includes the passage,

> After we arrived on this land Massau'u showed us the boundary of this continent. He Himself showed us the land and the life of the people and their leaders. Then Massau'u marked out the boundaries for each group until they covered the whole continent, after which each group was given an individualized Life Plan with certain religious beliefs and the way to worship, the way to live, the food to eat, the languages for each group.

The tract includes additional statements by Monongye, Hermequaftewa, and Banyaca (pp. 48-56, 58-66).

Yava, Albert
1978 *Big Falling Snow*, edited by Harold Courlander. Crown Publishers, New York.

As the subtitle states, this book is about, "A Tewa-Hopi Indian's Life and Times and the History and Traditions of his People." Yava was born in 1888.

With respect to clan migrations, Yava states (p. 36),

> As to where all these Hopi clans came from, every clan is the custodian of its own story. But adding it all up you can say that they came from just about every direction. Some of those who came from the north, from the neighborhood of Tokonave (which the white people renamed Navajo Mountain)—they include the Snake and Horn clans—originally were from farther west, probably in California. Other clans came from a place far to the south called Palakwa. No one knows for sure where Palakwa was. A number of clans traveled up and down the Colorado River and the Little Colorado for a good many years, maybe centuries, before they arrive here. Some, like the Coyote Clan (not the same as the Water Coyote Clan) came from Eastern Pueblo country.
>
> Looking at all these facts, it's clear that the modern Hopis are descendants of numerous different groups, including Plains Indians, that merged after gravitating to this place. Those people who say we are all descendants of the Basketmakers who up in the San Juan Valley make it sound too simple. We Hopis ... can't be explained so easily.

Yava points out the migrating groups that arrived at Hopi spoke several languages. The people from the north spoke Pauite or some Shoshonean dialect. Others spoke languages of the eastern Pueblos, Piman, and Apache. He observes that (p. 36) "... it was this mixture that came to make up what we now call Hopitu, the Hopi People."

Some Hopis migrated to First Mesa in search of Sichdukwi, Flower Mound (p. 37). Other people migrated looking for a place of harmony.

Yava provides a brief account of the emergence from the lower world into the fourth world (pp. 38-41). As he says (p. 41), "You can see the theme of dissension and evil, and of the search for a place of harmony, starts with the emergence story." He notes that different clans and the same clans from different villages have their own special details and different explanations for the emergence.

Yava observes (p. 40), "The emergence through the sipapuni is commemorated in a great many ceremonies. Sometimes it is discussed and debated in the kiva."

In the Hopi-Tewa account, the Tewas originated at a place called Sibopay, the navel of the earth, possibly located at a briny lake north of Alamosa in Colorado.

In regards to oral traditions, Yava observes that (p. 45), "Unless you have it written down, a little more gets lost with every generation."

Yava says (p. 46), "Every clan is the keeper of its own traditions, and sometimes you could call those traditions real history modified by legends. What the clan traditions contain has been very important through the centuries because they give a clan its place in the scheme of things."

Pokanghoya and Palengahoya (pp. 46-47) "are sometimes referred to as twins, but they really aren't twins because one is older and one younger." Palengahoya means "echo" because he does everything that his brother does.

Yava (pp. 55-59) provides an account of a young man's journey through the Grand Canyon that led to the origination of the Hopi Snake Dance. His account begins at Tokonave, at a village called Wuhkokiekeu.

Yava states (p. 71),

> All that open country around here in all directions has evidence of the clans on their migrations. Look on the rocks where they left their signatures. Sometimes you'll find these clan marks in the middle of nowhere. Sometimes they're at the site of an old village.. If you find a ruin, look around for the clan signs. Every clan has its own markings. If you see a horny toad, that's the Sand Clan. The Sun Clan is a circle with lines radiating from it and a face in the center. The Sun Glow, or Forehead, Clan just shows the top of the circle, the sun's forehead. The Water Clan draws three little half circles, concave sides down, looking like clouds, with straight lines coming straight down, meaning rain. The Horn Clan draws an antelope. Badger draws a badger footprint. Bear draws the footprint of a bear. If more than one clan stayed at a certain place, they'd all leave their markings. Of course they had no way of showing when they were at a certain place, but sometimes the sequence of markings can give a clue as to who was first and who came later.

Ceramics also provide evidence of the Hopi clan migrations (p. 71).

Yava describes his initiation into the One Horn Society during the Tribal Initiation ceremonies (pp. 73-81). At one point Yava and the other initiates were being tested by not being allowed to drink water for four days. During this period, the society members in the kiva "... would always be talking about water, how it flowed down the Little Colorado, and what such and such a lake looked like. It was for our benefit, of course. Old man Charlie was always talking about Grand Canyon and all the water that went through there, and how he used to swim in it when he was young. It made us pretty mad."

Yava states (p. 98),

... there are conflicting ideas about where people go when they die. One idea is that the spirits of the dead return to the underworld, form which the people originally came, through the sipapuni. Over here on First Mesa the people don't claim to know where the sipapuni is located. For them the location is lost to memory. But the Oraibis claim that the sipapuni is in the bottom of the Grand Canyon, and they'll tell you exactly where it is. Whenever the Oraibis go the Canyon on a ceremonial salt-gathering expedition—there's a big salt deposit there—they stop at the place where the sipapuni is supposed to be. I think its a marshy spot that is usually covered with muddy water.

He adds (p. 99),

The belief that dead spirits reenter the sipapuni is familiar to most Hopis, but there is also belief in a place called Maski, the House of the Dead or the Place of the Dead. It is generally described as being in the west, but over here on First Mesa we don't have any particular knowledge of where it is supposed to be located. Some of the Oraibis believe the entrance to Maski is in the Grand Canyon in the general vicinity of the sipapuni. There is a shrine to Masauwu over there. Because they believe this, the Oraibis generally bury their dead facing west, toward the Canyon to which their dead spirits have to go. We First Mesa people don't hold to that belief. We generally bury our dead facing east ...

Yava describes the Hopi trail to the Grand Canyon, stating (p. 117),

... that land traditionally belonged to the Hopis. West of Tuba going towards Grand Canyon along the old trail there are many petroglyphs showing that this country was an old Hopi region. Oraibi people went along this trail on their ceremonial salt-gathering expeditions. There's a big flat rock at a place called Teuteuveni where men on these expeditions made their clan signs after getting their salt. The Oraibis when there, but the Walpis went on their salt-gathering expeditions to Zuni Lake in New Mexico. They used to have a big ceremony in Walpi in connection with those expeditions.

Yount, George C.
1942 A Sketch of the Hopi in 1828. Presented by Robert F. Heizer. *The Masterkey* 16(5):193-199.

George C. Yount was a "mountain man" who visited the Hopi mesas in 1828. This article consists of an excerpt from the manuscript of Yount's collections published in full in 1923 (The Chronicles of George C. Yount, *California Historical Society Quarterly* 2:3-66). The "presenter" Robert F. Heizer adds several prefatory and concluding remarks that places Yount and his observations in historical and anthropological context.

Yount provides a brief but interesting summary of Hopi society, religion, economy, and architecture in the early nineteenth century. He refers to the Hopis as the "Mocos," presumably a variant on the word "Moqui." Yount mentions the Hopi's remembrances of "Old Bill" Williams, another "mountain man" who had visited the Hopis a year prior to Yount's trip. He notes that several other Americans had visited the Hopis during the year following "Old Bill" Williams' sojourn.

Yount makes one brief remark about the Grand Canyon. He says, "No history at all exists of the nation, or of its origin, save a vague tradition that their forefathers came from the Big Canon of the Red River ..."

As limited as this remark is, it provides nineteenth century documentation of the Hopi's traditions relating to their origin in the Grand Canyon. Given the Hopi's reticence to share their sacred history with non-Indians, and the fact that Yount did not speak the Hopi language, it is not surprising that Yount would characterize Hopi traditions as "vague." Taken in context, Yount's reference to the Grand Canyon is evidence of the importance of this area to the Hopi people.

While these migrations were taking place, an eastern group, the Firewood people, had been approaching, and after many years established themselves at East Mesa. "It was during the occupancy of Kuchaptuvela and before the Spanish *entrada* that friction developed with Sikyatki, and this resulted in the overthrow of that town and the dispersal of its population.

When the Rattlesnake and Horn people were in Tokonabi, the Squash and Flute people at Wuoki and the Bear at East Mesa, the Tobacco people built Honû-vi (juniper-shoot place") at the Hopi Buttes and later Awatobi. Their former home was in the south.

By 1629, when the Spanish missionaries began their labors, Ashy slope at East Mesa had been abandoned in favor of Kisakobi ("house ladder high-place") on the terrace below the modern pueblo, and the Snake and Bear people were joined by the Horn-Flute people from Kwastapabi, an event still commemorated in the biennial Flute ceremony. After the Pueblo Revolt of 1680 Kisakobi was deserted and modern Walpi founded.

In the meantime, the Squash people at Middle Mesa had abandoned Chukubi and built Mishongnovi, not however in its present location. Shongopavi and Shipaulovi and Oraibi all of which were established in the valley, were removed to their present sites after the Pueblo Revolt.

While the Rattlesnakes were still living in the valley between East and Middle Mesas, the Reed people entered the country from the east and settled at Lömé-va near Old Mishongnovi. After a quarrel with the Squash, they joined the Rattlesnakes and eventually became part of Walpi.

Also from the east came the Badger, who after long wanderings settled the Kisíu-va ("shadow spring") about 15 miles northeast of Walpi. Later they moved down Oraibi Wash, and halfway to Oraibi built Síu-va ("onion spring"). Ultimately they joined Oraibi.

p. 18, the Badger clan was established at Walpi by the marriage of a Badger woman, who contrary to custom, went to live with her husband's people. The Walpi Badgers later founded the adjacent village of Schomovi.

After the Pueblo Revolt, many refugees from the Rio Grande entered the Hopi country. Some of them founded Payupki ("river house") on Middle Mesa. In 1748, the Asa (Tansy Mustard) clan, at the solicitation of Walpi, hard pressed by Ute and Navajo, left the Rio Grande and after stopping at Laguna, Acoma, and Zuni, where some of their people stayed, built Chakwaina on Antelope Mesa. From there they went to First Mesa, but were not admitted by the Bear and Snake Chiefs. They settled near the spring Isba ("coyote spring") in a site called Sikyá-owa-tsomo ("yellow rock mound"). After battling the Navajo and Ute, they received permission to settle at Hano. They left after a dispute but were persuaded to return and give a place in Walpi at the head of the stairway trail. Later other Rio Grande puebloans founded the modern town of Hano. During famine in 1780, many Ása people went into the Navajo country, and the mixed bloods came back and joined people at Sichomovi, which had been founded by the Badger clan about the middle of the century.

p. 19, from the distant south, the Cloud clan worked northward to Palakwabi "which the Hopi traditionalists identify with a group of ruins on Gila river west of San Carlos. They were accompanied by the Lizard, Rabbit, and Sun people. A destructive flood, attributed to the Water Bullsnake, caused them to resume their northward movement, and after various stops they founded Homolobi ("breast high-place") on the Little Colorado River. There they were so plagued by mosquitoes that they abandoned that pueblo and founded

Pakachomo ("water soil mound") about 4 miles south of Walpi. Some of them joined Walpi, others the Middle Mesa towns. Their entry into the Hopi country occurred after the destruction of Awatobi and the founding of Hano and Sichomovi, probably in the 18th century.

"To summarize the evidence, legendary and documentary, it may be stated that the Hopi consist of the descendants of various groups that entered the country from the north, the east, and the south, and that the series of movements covered a period of probably three centuries, and perhaps considerably longer.

Trade with Havasupai

p. 30, *sáqa*, a very soft variety of turquoise obtained from the Havasupai, is processed in several steps and used for a turquoise blue paint.

Maski

pp. 39-40, describes death rituals and beliefs associated with "maski" (corpse house).

Salt

p. 47-48, salt is taboo during confinement in kiva during fraternity initiation

p. 116, salt is taboo during Sûs-tala initiation

p. 172, salt is taboo during katsina initiations

p. 221, salt is taboo during puberty rites.

Hopi Clans

pp. 61-62, reviews Fewkes, Stephens, and Kroeber's work on Hopi clans. With respect to the great number of clans names (78) that Kroeber said was too many for a population of 300, Curtis writes:

"The simple fact seems to be that the use of what are here called alternative names for the clans rose from the Hopi custom of bestowing personal names referring not only to the clan totem but to associated objects as well. In the course of time, some of these name-objects, those that appeared most frequently in personal names, became more or less synonymous with the true clan designation. The qualification "more or less" is made advisedly; for the Hopi themselves do not know just where to draw the line between these alternatives and those less frequently used words that are employed in the invention of personal names. An of course in the very nature of the case no hard and fast line could be drawn."

Clan "Legends"

Migrations of the Rattlesnake Clan, pp. 74-78:

"When all the race of human beings emerged from the lower world at Sípapuni, the tribes scattered each going in the direction that it chose. The Cougars and Doves proceeded northward along the east side of the cañon, and on a high mesa at Tokonabi, the built a village of stone houses and called it Tokóna."

In footnotes, Curtis identifies Sipapuni as "Located by the informant in the Grand cañon above El Tovar hotel." Tokonabi is located as "somewhere above Lee's Ferry."

pp. 74-78, Curtis summarizes a version of the story of the boy who goes through the Grand Canyon. In this version it is in a log hollowed out by fire and provided with a round door at each end. Marries a rattlesnake girl, obtains snake ceremonies, rejoins his people. In a footnote, Curtis notes that Fewkes thought this story represents the marriage of a Cougar boy with a nomadic Shoshonean woman.

p. 78, "In company with Flute and Squash people, the clans from Tokonabi departed from Wúko-ki, and near Oraibi wash they divided, the Squash clan founding Mûnyá-ovi, near the present Oraibi, and Chukubi. The Flute clan went eastward and settled at Lengyaobi [about thirty miles northeast of Walpi], while the clans from Tokonabi continued their march eastward. Midway between East and Middle Mesas they established a village."

The people then moved toward the mesa and built the village of Kuchaptuvela on the northern side of the terrace below Walpi. Later they built Kisakobi on a slightly higher level, and Walpi on top of the mesa during the Pueblo Revolt.

Migrations of the Horn Clan, pp. 78-79

p. 78-79, "The Horn people were living in the north, and wishing to find a better country they moved southward across Colorado river, and arrived at Toknonabi, where people were already living."

p. 79, They went with all the people to Wúko-ki, and later split off and founded the village of Múnkap-ki ["small-stream house" -- near Moenkapi]. They then moved up the canon, and lived for awhile on Oraibi Wash. They then moved to Lengyaobi (about 30 miles northeast of Walpi), where they joined the Flute people. They then went to Qásta-pa, a spring 2 miles north of Wípho spring. They eventually were admitted onto First Mesa.

In a footnote on p. 78, Curtis notes his informant identified the point of crossing as "Crossing of the Fathers."

Migrations of the Cloud Clan, pp. 79-83

p. 80, "Four divisions came northward in company: the Cloud, Lizard, Rabbit, and Sun people." They traveled and eventually went to Palatkwabi, which Curtis says his informant identified as a ruin in the Gila valley west of San Carlos and south of Pinal Peak, which the Hopi call Qán-tûqi ("mescal mountain").

pp. 80-82, story of flood at Palatkwabi, people leave and eventually move to Homolobi. Eventually the Cloud Clan joined Walpi, after the Pueblo Revolt.

Migrations of the Tobacco Clan, pp. 83-89

p. 83, a flood in the underworld forced people to enter the upper world.

"In the new world was light, but, as below, water was everywhere; so they implored Pökánhoya and Palónao-hoya, two little boys who had accompanied them from below, to devise means of draining the earth. The brothers directed them to feather some small arrows with the feathers of a bluebird ... and a robin ... and shooting these tiny missiles into the great rocks that confined the water, they formed the Grand cañon [Písis] through which the water soon drained off, leaving the earth soft and muddy. Then the brothers

ground up many kinds of shells and hard pebbles, and spread the powder over the land, and the ground became hard and dry."

p. 84, "Five clans departed together: Tobacco, Firewood, Túvis, Reed, and Badger. They passed to the south of San Francisco mountains, and at last built a village at Honú-vi ["juniper-shoots place"] among Hopi buttes."

After many years they moved on and built Awatovi. Curtis reviews the events that led to the destruction of Awatovi.

Migrations of the Reed Clan, pp. 89-93

pp. 89-90, gives another version of how the twin War Gods drained the land. This version also includes consultation with Spider Woman in the Grand Canyon. The first attempt failed so they prepared another bowl of medicine water. "They gazed into it and saw a condor *[qátukua]*, and they shot their arrows at the bird in the bowl. Immediately a sound of fluttering and falling was heard above them, and a great condor fell down before them. With its feathers they tipped four arrowshafts of pine, oak, spruce, and syinga, which they shot one by one into the rocky walls, and through a great hole water began to rush. As it poured through it cut out what is now the cañon of the Little Colorado." They then made the earth hard as in the previous version.

p. 90, "Making no permanent halt on the way, they reached the Middle mesa and built a town of stone houses at Lömé-va, on the top of a small conical butte on that side of the mesa looking toward Walpi. Then the two brothers, after giving to the chief two small stone images of themselves, declared their intention to go, and in spite of the entreaties of the people, they and the Spider Woman departed to Öna-patûupa ["salt lake" -- the Zuni salt lake], where they still dwell."

p. 90, while the Reed people dwelled at Lömé-va, others established a town at Old Mishongnovi. After a sad event, the Reed people left and moved towards East mesa, where they joined the Rattlesnake people. But owing to raids from other tribes, these two groups split, and the Reed people built Kisakobi at the southern end of the mesa. They were eventually admitted to Walpi.

Migrations of the Badger Clan, pp. 93-95

p. 93, after emerging from the underworld, the Badger Clan wandered about the earth and at last settled Kisíu-va, where they lived with the Katsínamu. They left that place and continued down Oraibi Wash about 1/2 way to Oraibi and built the village of Síu-va, a short distance from the spring of that name. Here they saw a badger and they began to call themselves by that name. They moved closer to Oraibi, but were refused permission to enter the village. After the son of chief obtained ceremonial knowledge from a rabbit, they were admitted to Oraibi. After living for many years at Oraibi, a Badger woman married into Walpi, and established the clan in that village.

p. 95, After the destruction of Awatovi most of the Awatobi Badger women were taken to Mishongnovi and a few to Oraibi. The Hopis do not think there is a relationship between the Awatobi Badgers and the original Oraibi Badgers, each having separate traditions. The Awatobi Badgers once inhabited a village, now a ruin, between Hathorn's store and the ruin of Awatobi.

Migration of the Ása Clans, pp. 95-98

p. 95, the people descended from the Ása ["tansy mustard"] people "came upon the earth at Sípapûni-tûqi ["Sípapûni mountain"] near the head of Hopók-vayû ["east river" --Rio Grande]." The Ása brought the Cháqaina Kachina into the Hopi pantheon.

pp. 96-97, long story about how the Tewa were asked to come protect Hopis on First Mesa, but were initially refused permission to enter and live at the village. After the Ása defeated the Utes in battle they were admitted.

p. 98, about the time of the "great famine" about 1780, some Hopi people went to Túpkaï-páka ("cañon mouth" -- the mouth of Canyon DeChelly) where they lived among Navajo. Many of these Hopis were from the Ása clan. The second generation of mixed Hopi and Navajo returned and were taken into Walpi, but this led to overcrowding of the village, and many of them joined the recently established village of Sichomovi.

Hopi Religion

p. 103, "Pökan-hoya (*pökan*, meaning unknown, *hóya,* little) and Pälänao-hoya ("echo little), his younger twin are the boy war gods. Two gods bearing these names live in the crater of the Zuni Salt Lake and two others live at ön-tûpka ("salt canyon") in the Grand cañon, each pair with its grandmother, Spider woman. When the Hopis make prayer-sticks or *naqaqsi* for the warrior gods at the Salt Lake, they deposit them on the east side of the pueblo, and when the offerings are intended for the Salt cañon they are placed on the west side of the mesa. The exigencies of storytelling have resulted in the invention of many other homes for the warrior gods, but these two places are the only homes recognized in ceremonies. The twin gods are supplicated for courage, and because of their indifference to suffering, they are requested to visit the North Chief, and have him send snow and resultant moisture for the fields."

p. 104, images of the war gods were taken from Walpi to Mishongnovi for the approximately quadrennial initiation of the Wuwtsimi.

p. 104, "Ón-wûhti ("salt woman") is supplicated with offerings at two shrines, one at the salt cañon in the Grand cañon, with the other near the Salt Lake of the Zuni. Supplicants pray they may obtain the salt easily, saying, for instance, "We offer these prayers to you that you may keep the salt pure, and let us get it easily." The warrior gods also receive similar petitions from the salt gatherers.

p. 103-104, "In mythology the war gods travel on the rainbow, or on the downy feather of an eagle, and thus move about with almost instantaneous rapidity. They understand the language of all creatures, and know the secrets of medicines to cure sickness."

pp. 131-132, The cult of the war gods, in the hands of the Warrior fraternity , Móts-wimi, as added to the ceremonial calendar by the Reed people, and the head of the Reed Clan is always the Warrior Chief. The members of the warrior society are either Reed men or people who have taken scalps in battle. "According to the Reed legends the twin boys Pöká-hoya and Palönao-hoya, with their grandmother Spider Woman, accompanied the people in the ascent from the underworld, and after getting them safely started on their slow migration toward their future home, they gave the people stone images of themselves and then disappeared. The images of the war gods, and a small stone called Spider Woman are now kept in a sealed niche in the wall of an unused room in a Reed house. As the war gods not only are very powerful against sorcery, but also control weather, they are worshipped in the winter, four days after the winter solstice ceremony, in order that there may be abundant snow to store moisture in the ground.

p. 134, Curtis states in a footnote that Fewkes called attention to the probable connection between the warrior fraternity and a similar Zuni society, deducing that the Reed people came from the Zuni villages, bringing the war cult with them.

p. 143, in a long description of the Snake Dance, Curtis states "Of frequent occurrence are the words *'Síapûpuni Tsámahiya ... Tsámahiya* is the song form of Tsámaheya, the name of the scout ... the people at Tokonavi sent over the country to find people with whom they could unite; *'Síapûpuni* is for the ... place of mythological emergence of the Snake people from the lower world."

Curtis describes the Warrior society ceremony and ritual activities in 1911.

Stories of the War Gods

p. 195, The Crier Chief's son was taken by the Winged Snake, and the chief wondered how to save him. "His first thought was of the two brothers, those who lived at sá'kpi, and of the other two brothers who lived at Salt lake and of the two who lived at Ón-tûpka (Salt cañon - a place in the Grand cañon above El Tovar hotel, where the Oraibi people sometimes gather salt.)."

p. 196, the war gods from the Grand Canyon visit the war god brothers at Salt Lake, and work together to save the young Hopi men who had been enslaved by the Winged Snake.

p. 198, The Twin Brothers Depart from East Mesa to Salt Lake, a Walpi Reed Clan story. After settling at Mishongnovi, the twin war gods wanted to marry the chief's daughter. Spider woman warns them not to court the daughter. The twin brothers go to a spring at Toreva to meet the girl when she is gets water. They ask to drink from her dipper. When they finished, she scrubbed it twice with sand and washed it out. This displeases the twin gods, who laugh and go home. They talk to their uncle, Honani (Badger), and he advises them to make a deerskin bag, which Badger breaks wind into. The war gods take this bag to the spring, and strike the girl in the rump. She returns home and breaks wind for the next three days. She tells her father what happened, and he goes to Spider woman and asks to be rid of the problem. The war gods return to Badger, he fills a bad with wind. The gods go to the chief's house and break this bag over the rump of the girl, and she is immediately relieved.

"Now the chief had promised, and the girl agreed, that if they would make her well again they should have her for their wife. But they knew not what to do, because the two could not sleep with one wife. So, the younger gave up his right and returned home. It was not long until the people of Mishongnovi began to show their dislike for the girl's husband, because he was so dirty, and soon he was sent home. The Spider woman and the two brothers became very angry, and said they would no longer live near such people. They had helped them in their difficulties, but since the people did not like them, they would leave. So they departed to Salt Lake, where they still live to this day. *Paiyáava!*

Salt Woman

p. 165, Salt woman from Salt Lake is associated with feats of magic of Yaya-wimi, a religious society. The Yaya priests called Salt Woman from the lake. She came and threw a little salt into a hole they had dug which had filled with water. The priests thereupon removed a much larger quantity of salt and distributed among their female relations, "just as it is done by salt gatherers returning from the Salt Lake." They gave pahos to Salt Woman and she returned to her home.

Informants

p. 224, Curtis lists 14 informants from Walpi, all born between 1830 and 1878. It is obvious that much of Curtis' description of Hopi clan migration history is taken from the perspective of these First Mesa informants.