RESEARCH ARTICLE

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Mass Inhumation and the Execution of Witches in the American Southwest

Recent analyses of prehistoric multiple inhumations in Anasazi sites in the American Southwest have argued that cannibalism best explains evidence of defleshing, cutting, and bone breakage. The validity of this explanation is questioned in a review of ethnohistoric and ethnographic literature on Pueblo witchcraft and witch execution. A model based on Puebloan procedures for witch destruction is offered which accounts for osteological patterning in the archaeological record as well as contextual and artifactual evidence not considered previously. [Anasazi, Pueblo Indians, cannibalism, witchcraft]

In the late 1960s, the publication of a "secondary burial" from the Polacca Wash site in northeastern Arizona initiated a series of studies arguing that cannibalism was practiced by the prehistoric Puebloan cultures of the American Southwest (Olson 1966; Turner 1983; White 1992). Except for a few responses (Baker 1990; Bullock 1994; Walker 1993), the evidence for cannibalism has rarely been questioned or seriously tested, and few alternatives have been proposed. This paper presents an alternative argument to the assertion that cannibalism was practiced. I intend to demonstrate that Pueblo and Navajo beliefs about witches include an intimate and specific association between cannibalistic acts and becoming a witch. This association and the negative connotations and fear of becoming a witch may preclude anthropophagy even under extreme dietary stress. In fact, Pueblo aggression against witches classified as cannibals includes complex rituals of execution involving systematic dismemberment and burning. These behaviors better explain the material remains found archaeologically and provide a strong argument against cannibalism as a dietary practice.

Southwestern Mass Inhumations

More than 30 mass inhumations have been identified in the American Southwest in Utah, Colorado, Arizona, and New Mexico. These cases are typically classified as Anasazi because they generally occur in the Four Corners region from the early Pueblo II to Pueblo III periods, approximately A.D. 950–1300 (see Figure 1 and Table 1). While the term *Anasazi* covers a very broad geographic area marked by numerous distinct subtraditions or cultures, the archaeological cases of human dismemberment and mass internment span these subregions and also occur in the protohistoric or post-Anasazi period.

Reviews of many of the better-known cases of human dismemberment and defleshing are provided in studies by Turner (1983), Baker (1990), and White (1992). A detailed summary of the osteological patterning is unnecessary given the thoroughness of White's work, and it is the osteological patterning that is generally accepted by both critics and supporters of the "cannibalism theory." In brief, inhumations of the sort listed in Table 1 contain from 1 to 30 individuals, including both sexes ranging in age from juvenile to adult. Osteological analyses indicate a high degree of perimortem bone modification, which includes some or all of the following characteristics: perimortem fracture (comminuted fractures, Bullock 1991), cutting, percussion, crushing, scraping, and burning (Table 2). A less common feature includes "pot polish" identified by White (1992) as an effect of boiling, although this has been questioned (Bahn 1992; Bullock 1994; Villa 1992).

The most effective argument for cannibalism is provided by White in his recent book, Prehistoric Cannibalism at Mancos 5MTUMR-2346 (1992). He (following Villa et al. 1986; Villa et al. 1988) argues that defleshing for consumption is indicated by similarities in modification pattern and element presence in the butchered remains of animals and humans from several Southwestern sites. Logically, White suggests that one would expect similar patterning in bone modification as a result of defleshing a large mammal for food, whether it be human or nonhuman. However, the argument's weakness lies in the assumption that the mammal to be butchered is "food." Butchering patterns for nonconsumption are not sufficiently considered and, therefore, patterns of defleshing which may resemble food-related butchering are not isolated from patterns that are. An appropriate argument for or against cannibalism must include, therefore, a more careful consideration of cultural or contextual factors that might lead to human bone modification or defleshing. This realization opens the field of potential bone-modifying behaviors, from food-related activities to all other activities in which defleshing is involved.

In the following discussion I focus on the question of witchcraft and witch execution as a likely source for perimortem modification of human bone (both before and after death). Other potential sources for similar effects on bone such as secondary burial or warfare-related activities are not discussed in detail (see also Baker 1990; Bullock 1991; Walker 1993). This omission is intentional and not a

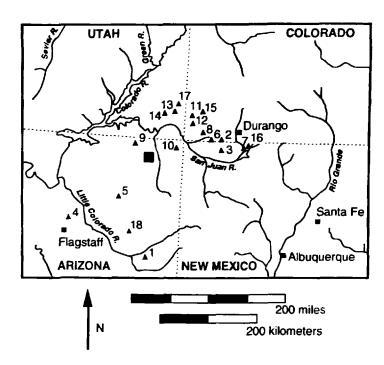


Figure 1. Triangles with numbers indicate selected archaeological sites in which human bone modification and possible cannibalism have been reported (after Baker 1990: 101). See Table 1 for references and site names.

dismissal of these behaviors as potential causes of human bone modification. Instead, witch execution as a common and widespread Pueblo phenomenon is offered as a better explanation for the patterns identified by White (1992) and others as diagnostic of cannibalism.

Table 1. Selected archaeological sites exhibiting mass inhumations with modified human remains. (Refer to summaries by White 1992 and Turner 1983.) Map key numbers refer to Figure 1.

Map key #	Reference	Site				
1	Hough 1903; Turner and Turner 1992	Canyon Butte Ruin 3				
2	Morris 1939	La Plata 23 Rockshelter				
3	Morris 1939	La Plata 41				
4	Smith 1949, 1952	Big Hawk Valley (NA-682)				
5	Olson 1966; Turner and Morris 1970	Polacca Wash				
6	Nickens 1975; White 1992	Mancos Canyon (5MTUMR 2346)				
7	Flinn et al. 1976	Burnt Mesa (LA 4528)				
8	Luebben and Nickens 1982	Grinnel Site				
9	Nass and Bellantoni 1982	Monument Valley				
10	Turner 1989	Teec Nos Pos (NA 10674)				
11	Swedlund 1966; Malville 1989	Porter Pueblo (5MT1)				
12	Malville 1989; White 1992	Yellow Jacket (4MT3)				
13	Baker 1990	Rattlesnake Ruin				
14	White 1991, 1992	Cottonwood Canyon				
15	Wilshuesen 1988	Marshview Hamlet (5MT2235)				
16	Dittert et al. 1966; Turner 1983; White 1992	Sambrito Village				
17	White 1992:380	Verdure Canyon				
18	Turner 1983; White 1992	Leroux Wash				
<u>-</u>	Grant 1989	Fence Lake				
_	Walker 1993	Homol'ovi II				
	Ogilvie and Hilton 1994	LA 83500 and LA 83407				

Table 2. Descriptive characteristics of human bone from Anasazi sites thought to exhibit cannibalism (Turner 1983; White 1992:39).

- 1. A single short-term depositional episode
- 2. Good-to-excellent bone preservation
- 3. Specimen counts between 400 and 3,500
- 4. Nearly complete disarticulation of elements
- 5. Relative lack of vertebrae
- 6. Massive perimortem breakage of most elements
- 7. Breakage by percussion hammering
- 8. Almost universal breakage of the head, face, and long bones
- 9. 2% to 35% burning after butchering and breaking
- 10. Butchering and skinning cutmarks on 1% to 5% of all specimens
- 11. Gnawing on fewer than 5% of all specimens
- 12. A damage sequence of cutting, breaking, burning, and gnawing
- 13. An extremely low incidence of bone tools among assemblages
- 14. A ratio of alteration to the bone lots as follows:
 perimortem breakage = 95
 burning = 20
 cut marks = 3
 possible gnawing = 2

Pueblo and Navajo Witchcraft

Whether Navahos actually carried out rites of witchcraft—or at least whether such rites were carried out by many individuals at all frequently—is, in the present state of our information, as open to question as in the case of the Pueblo Indian. But there is no doubt...in both cultures belief in the existence of witches.... Distrust and suspicion of certain persons unquestionably influence various behaviors, and there are certainly acts of violence. [Kluckhohn 1944:5]

Witchcraft as a cultural phenomenon defies generalization (Larner 1981:7; Macfarlane 1970:3). Nevertheless, most anthropological definitions recognize witchcraft as the illicit use of extra-ordinary or supernatural power to cause harm or to influence events (Douglas 1970; Evans-Pritchard 1937; Mair 1969; Marwick 1970; Walker 1970:1-2). For Kluckhohn, witchcraft is the "Navaho idea and action patterns concerned with the influencing of events by supernatural techniques that are socially disapproved" (1944:5). As an icon of illicit and unregulated behavior, a witch "is a person who does not control the impulses that good members of society must keep in check" (Mair 1969:38). A witch personifies the extremes of evil and violent, antisocial behavior including insatiable hatred, desire for meat, and perverted sexual lusts, which lead to the many deaths attributed to them. Witches commit incest and are typically cannibalistic (Hawley 1950; Kluckhohn 1944; Mair 1969:38-39; Parsons 1939; Simmons 1942; Titiev 1942).1

Anthropological literature on witchcraft is extensive, focusing on aspects including perception theory (Douglas 1970; Evans-Pritchard 1937), political analysis, social relations, functionalism, theories of action, and psychology (e.g., Simmons 1942). For the present discussion, I em-

phasize the strong association in Pueblo beliefs between witches and cannibalism. Beliefs about witchcraft, like cannibalism, reflect ethno-ontological perspectives of good and evil, the nature of humanity, and the relationship of human beings to the environment and the world (Harvey 1972:207; Ortiz 1972:144–145; Sanday 1986).² In assessing the cannibalism hypothesis as an explanation for Anasazi remains, a consideration of Pueblo beliefs about cannibalism and its relationship to witchcraft points toward the alternative explanation of witch execution. Thus, I will argue that the cannibalism hypothesis is incorrect on two levels: first, in terms of documented Puebloan belief (which is generally accepted as relevant to understanding prehistoric Anasazi society); and second, in terms of the archaeological record.

Pueblo Witchcraft

The Pueblo concept of the witch is inextricably tied to concepts about life and human origins. Witches exist alongside humans and do not exist apart from other living beings. Thus, they are not supernaturals (Hawley 1950:144). In the mythical emergence of the Tewa from the underworld, witches accompany the people and are defined as those "of a different breath" (Ortiz 1969:15). Witches have a physical and a spiritual existence that is like other human categories including common people, and political and religious officials (Ortiz 1969:15). Witches "live on the unexpired lives of their victims [captured or indoctrinated souls unable to leave for the afterlife]" and "they must continually kill or perish themselves" (Ortiz 1969:140). In this way, witchcraft presents a constant threat to the other categories of human existence. This threat can be controlled by medicine or curing societies, and witches can be killed or destroyed.

Anyone can become a witch or can be accused of witch-craft. For the Hopi, Zuni, and other pueblos, the witch can be an individual born with two hearts. The good or human heart is consumed by the bad heart, allowing the evil to express itself (Ellis 1970; Parsons 1927; Simmons 1942; Titiev 1942). Outsiders are nearly always potential witches. Children, as the uninitiated or "half-humans," are especially susceptible to witches and can be stolen or unknowingly indoctrinated by a witch parent (Ortiz 1972:145). The acquisition of witch power by inheritance or from parental teachings is recognized throughout Pueblo society and resembles patterns of religious society membership (Ellis 1970: fn. 6; Fox 1967:265; Parsons 1927).

Knowledge of witchcraft or power can be obtained in a variety of ways, including an exchange of goods or through contractual obligations between the individual seeking power and the witch society. The nature of supernatural power or exceptional abilities can be ambiguous, whether it is used for antisocial purposes as witchcraft or to benefit the community (Lewis 1986; Pandey 1977;

Parsons 1927; Whiteley 1988:69). Thus, those who are recognized as possessing extraordinary abilities or secret knowledge may be suspect (Whiteley 1987).

Entrance into a witch society parallels induction into other religious societies. The individual must earn the "right" to obtain secret knowledge, conduct rituals, and handle the equipment or fetishes appropriate to specific ceremonies. For witches, this may include the acquisition of a witch bundle, the equivalent of a ceremonialist's bundle commonly used in both Pueblo and Navajo ritual (Ellis 1970; Frisbie 1987). A "ceremonial father" acts as tutor and sponsor for the initiate, and payment of the sponsor often consists of a "deer," which is actually a close relative to be sacrificed and eaten by the witch society (Ellis 1970; Hawley 1950).

A variant of the Taos story, Witch Wife, for which analogous examples are known from Isleta, Picuris, Santa Clara, Laguna, and Hopi, provides a good example:

There was a very pretty girl, and a witch boy came to ask her to marry him. The girl said, "No, I do not want to marry you." He was very [much of a] witch and in a few days that girl got sick and died. And after four days they had to make a feast for her. . . . On the fourth day the witches went to dig her up and take her to the boy's house. The witch chief rolled a wheel over her, and she came to life and said, "Oh, I am so tired!" The people said, "Hurry up, roll the wheel again!" He rolled it. Then she turned into a deer, and they shot her with arrows, and the women who came in had big bowls to cook the meat, after the men cut it up. Early in the morning the women took out the bowls of meat. There was a little girl in a house nearby looking at them. The chief said, "Someone is looking at us." When that little girl heard that, she lay very quiet. Then she peeked again. Early in the morning she told her mother what she saw. When a woman came into their house with meat, she threw it at her and said, "You cannibal (people eater)! I would not eat that, you eat it yourself!" [Parsons 1940:40]

Similar stories range from those that are presented as true accounts to those that are clearly myths. Folktales reveal the character and behavior of witches, including their cannibalistic proclivities, and they often illustrate the methods by which witches are punished and destroyed (Boas 1928; Cushing 1979, [1901]1986:365–384; Lummis 1894; Parsons 1940:40, 54–55; Spinden 1976). Entrapment or trickery to kill or to obtain new society members are common themes in witch tales. Entrapment may include the introduction of human flesh by witches or giants in the food bowls of potential initiates.

Witchcraft and Death Rituals

The link between witches and death includes an association with corpses, human flesh, and necrophilia. In this way, they live off the souls of the living and maintain their power to cause sickness and misfortune. It is often acknowledged in stories about witches that one of their spe-

cial abilities is bringing the dead back to life (often individuals whom they have killed) to obtain control of the spirit or to use corpses to make evil medicine and cannibalistic feasts (Parsons 1929). Resurrection of the dead and capture of the spirit are violations of social norms that dictate that the soul of the deceased should leave the community four days after burial and return to the ancestors (Ellis 1968; Ortiz 1972:145; Parsons 1939). Appropriate measures are necessary to ensure the departure of the soul of the deceased. These may include graveside vigils during the four days preceding the soul's journey to the afterlife to guard against witches who may appear in animal form (Goldfrank 1967:145–146).³

In an unusual example of mortuary ritual portrayed in a series of paintings from Isleta, corpse pounding to exorcise the spirit emphasizes the need to separate the physical and spiritual elements of the deceased and the occasional need to destroy the body to ensure this separation. As it is portrayed and described in an accompanying text, once the body is placed in the grave which is partially filled with soil, a male relative, not the father or brother, pounds the dirt with a mallet of cottonwood or stone weighing as much as 50 pounds.

The partially buried corpse is struck

first over the face, knocking the teeth out, then over all the body.... They claim if they do not pound, he (or she) may come to life and suffer in the dirt, so they give it to him (or her) extra heavy.... Sometimes after it is pounded the dirt lowers about 3 or 5 inches, then they say the dead one does not want to leave the world, he wants his family or relations to go with him. [Parsons 1962:68; refer to Goldfrank 1967:175–176 for original text by the artist]

For Parsons (1962), this act protects the community from the spirits of the dead. Pounding of the corpse not only releases the spirit but also prevents the spirit from using its body should it want to return to the living. Dismemberment and burning of witches is a similar process (see below). Pounding the corpse may also render it useless to witches who may wish to rob the grave. Corpse pounding is not often mentioned in the literature on Pueblo funerary rites. However, in this case, an actual funeral that took place in 1937 is illustrated (Figure 2). The deceased was a Chief (Sheriff) and the oldest man of the War Society. The extra measures involved in his burial may have reflected his age, position, power, and the ambiguity which may accompany an individual of such stature (Parsons 1962: 62; Whiteley 1987).

Witchcraft and Stress

Increasing stress in a community may lead to sudden and rapid increases in witch accusations and execution. A primary source of stress among Southwestern groups is subsistence stress brought on by life in a semi-arid and highly unpredictable environment (see for example Cordell

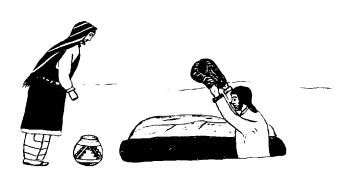


Figure 2. Isleta watercolor circa 1940 illustrating "corpse pounding" as part of a funerary rite. Courtesy of the American Philosophical Society.

and Plog 1979; Dean et al. 1994; Ford 1972; Martin 1994; Minnis 1985). However, other sources may include sociopolitical stresses brought on by inter- and intracommunity dynamics and competition, which also contribute to increased witch accusation. New stresses due to contact with the West, including acculturative forces and diseases not previously encountered by native societies, may have dramatically increased the frequency of witch slayings.

The ethnohistoric literature contains numerous examples of witch slayings during high periods of stress, including drought and epidemics, extending back to the Spanish colonial period (Aitken 1930; Bandelier 1890; Brugge 1977; Hill 1982:149; Kluckhohn 1944; Simmons 1974; Twitchell 1914). Examples of witch slayings are particularly well known at Nambé, and at other pueblos dating to the nineteenth century. Their frequency led Bandelier to note that "certain pueblos, like Nambé, Santa Clara and Cia owe their decline to the constant inter-killing going on for supposed evil practices of witchcraft" (1890 :35, fn. 1). Such cases include, in 1854, the case of two men of Nambé who were executed with a shotgun for eating children and performing acts of witchcraft (Simmons 1974:96-98). In the following year, the "butchering" of three men and a woman from Nambé also occurred for alleged witchcraft (Bandelier 1890: fn. 1).4

Pueblo Factionalism

Pueblo factionalism is often marked by increases in witchcraft accusation and has been attributed to the divisive aspects of Western contact (e.g., Dozier 1966; Ellis 1979; Fox 1961b; Titiev 1944; Whiteley 1988). Nevertheless, migration legends and abundant archaeological evidence for splitting and refounding of communities indicate that intra-pueblo disputes and community fissioning are behaviors that precede the contact period (Dozier 1966:175). Witchcraft accusation and sanctioning may have played an important role in "internal feuds" resulting

in factionalism. Similarly, witchcraft accusations in response to a decrease in the environment's carrying capacity to support a village's population may have led to the departure of individual families and the eventual breakup of a community (Ford 1972:15–17). This may have been the case for the Hopi, in 1906, when increased suspicion and witchcraft accusation played a role in the breakup of Oraibi Pueblo (Aberle 1951:18; Whiteley 1987, 1988).

Intercommunity Aggression

Intercommunity conflict or competition would have certainly led to accusations of witchcraft. However, unlike intracommunity stresses and suspicions of witchcraft, forms of dealing with the threat of sorcery must have been dramatically different and may have included warfare (Ferguson 1992). The historic destruction of Awatovi Pueblo in the fall of 1700 and the massacre of prisoners taken by Hopi warriors provide an important example (Baker 1990:166–170; Cordell 1984:355; Courlander 1971; Fewkes 1893, 1898; James 1974; Malotki 1993; Montgomery et al. 1949; Voth 1905:246–255).

Awatovi's destruction was the culmination of internal disputes compounded by suspicions of witchcraft, attacks on nearby villages, and a widespread fire that destroyed the fields of other villages except their own (Baker 1990; Fewkes 1893; James 1974). As a result, warriors from the pueblos of Oraibi, Walpi, Mishongnovi, and Shongopavi converged on Awatovi. The men of the town were trapped and burned in their kivas. The rest of the village was destroyed and the survivors, the women and children primarily, were taken captive.

In the aftermath, many of the captives were massacred at different locations, although the geographic placement of these sites varies in different versions of the story (Malotki 1993:289). In general, women with knowledge of song-prayers or ceremonies to bring rain were spared, while all others were tortured, decapitated, and/or dismembered, at locations identified as "Maski" (House of the Dead) or "Mastcomo" (Mastsomo, Death Mound). In a variant of the story, the surviving men of Awatovi attempted to regain the captives. However, these warriors were also killed and decapitated, their skulls being buried at "Makoteu" (Masqötö, Skull Mound) (Baker 1990:170; Courlander 1971:183; Fewkes 1893:366; Malotki 1993: 289; Peter Whiteley, personal communication).

The named massacre(s) sites may have been areas traditionally tied to the dead and perhaps, by association, with witches or the disposal of witch remains. Turner and Morris (1970) argue that the Polacca Wash site represents the location of one of the massacre sites associated with the Awatovi destruction. In addition to the extensive mutilation identified through analysis of the osteological remains, they also identify cannibalism. This seems to be an over-interpretation of the evidence. Turner and Morris

recognize that execution and dismemberment of witches were practiced at Hopi (1970:325). However, cannibalism is not a necessary outcome, and this interpretation is generally not supported by the numerous oral histories that are specific in their accounts of the mutilation of captives but that do not mention cannibalism.

Witchcraft and Cannibalism

Anyone suspected of witchcraft was feared and shunned. This was not only because they might use their power to harm, but also because, under guise of friendship, they might transmit power to an unwitting person. Unwitting acquisition of the power of sorcery was guarded against for several reasons. One was the consequences of antisocial behavior. Another was the belief that the acceptance of the power involved a contractual obligation to participate in human sacrifice and cannibalism, both traits extremely repugnant from the point of view of Santa Clara culture. [Hill 1982:312, emphasis added]

To quote I. M. Lewis (1986:67), "Indeed, the statement, 'A witch is a cannibal,' is one of the more widely current minimum definitions of the witch role." Pueblo witchcraft is often predicated on the performance of human sacrifice and cannibalism, so much so that the terms cannibal and witch could be used interchangeably. As a general rule, Pueblo attitudes are strongly antithetical to the proposition that a form of socially condoned cannibalism, even during periods of stress, might ever be practiced. Cannibalism represents a clear infraction against the moral order upheld by society and its representatives. This is demonstrated in cases of witchcraft accusation at Zuni, in which the accused or the accused's family are asked if they ate their victims (Smith and Roberts 1954:40), or as is illustrated in the following excerpt from a Nambé folktale:

One day my husband's grandmother was making wafer bread. The patowa were working that day. She took them a big basket of wafer bread and a big bone. She handed it to the Outside chief. When they were going to give her medicine water, she was gone, she did not care for the medicine water. When they all sat down to eat, one of the pufona had to spit his medicine around each basket. Now the dinner brought by this lady began to bubble up. So they found out that she was bad. Her dinner was the flesh of a dead child. They put it to one side. When the women came for the baskets, all had been made use of except that one basket. They handed her her basket as she had brought it. She grew angry and took it back to her sisters. "Now they are afraid of us," she said. "We will do something bad to them." [Parsons 1929: 304-305]

In this and other tales, entrapment is an important theme and, as previously observed, emphasizes that great care should be maintained concerning what is eaten even during periods of hardship. Cushing (1920:76-77) retells a story of famine in which the people would eat the ground-up bones of animals and even die rather than accept more palatable food from a dubious source (a witch).

The Execution of Witches

Punishments for witchcraft are highly varied and generally "fit the crime" as it is perceived by the priests or officials charged with evaluation of an offense. As a general rule, witchcraft was considered one of the most serious offenses in Pueblo society and was punishable by death (Hawley 1950; Smith and Roberts 1954). However, less severe punishments could include fines, ostracism, and physical torture. This suggests that certain kinds of witchcraft were less offensive than others and, as such, may vary according to categories similar to those outlined for Navajo witchcraft including "witchery," "sorcery," "wizardry," and "frenzy witchcraft" (Kluckhohn 1944).

Other factors may also influence the severity of punishment. The social position of the accused and his/her relationship to the officials of the Medicine Society or priesthood are important variables in the determination of punishment (Whitely 1987). The gender of the witch may also play a role, although men and women may be executed equally just as they both may become members of witch societies. Several folktales and accounts from Zuni indicate that the accused witch was often an in-law, blamed of unusual or threatening behavior by the spouse's family (Smith and Roberts 1954).

Finally, variables that do not pertain to the accused, specifically, may affect the outcome of the witch trial. In all cases, social context including the motives or strategies of both the accused or confessed witch and the accuser(s). where they can be known, influence the manner in which witchcraft may be perceived and the ways in which individual witches are identified and treated. In this sense, accusations are expressions of antagonism and social conflict which may affect an individual or be extended to an entire community (Nash 1967:128).7 The overall status of the community is a key component that may have a determinant effect on the punishment of witches. Verbal and physical chastising or temporary to permanent ostracism from the community may be more common overall. However, during periods of high sociopolitical, environmental, or economic stress, the opposite may be true. Execution, violent sanctioning, and "witch hunts" may increase in number as a result of community leaders' increasingly strained attempts to eliminate accumulated evil or the perceived stresses affecting the community.

Where execution is required, Pueblo society regulates intracommunity tensions by redirecting "violent" or potentially inappropriate actions in defined ways. In 1880, Cushing (1979:144) noted that the "horrible violence" of an execution at Zuni resembled an act of sacrifice. Ritual killing of witches effectively approximates an act of sacrifice in its attempt to reaffirm socioreligious norms of behavior and to protect the community through purification and the destruction of evil. As a result, legitimate killing

through ritual procedures of execution emphasizes the sacredness of the event (Bourdillon 1980; Nash 1967).

Pueblo Curing and Rituals of Execution

Witches are the primary cause of serious illness and death, often through the magical injection of objects such as broken glass, live snakes, thorns, and feathers into the victim's body. Another method is to "steal someone's heart" (Parsons 1929, 1939; White 1962:288). Medicine or curing societies have the power to extract such objects or return a heart that has been taken. Medicine societies also have the power to destroy witches. Curing ceremonials at Zia, Acoma, Cochiti, Isleta, Walpi, Santa Clara, and Zuni manifest techniques including crystal-gazing, witch-fighting, sucking-out, brushing-out, and "heart" retrieval (Fox 1967; Hill 1982; Parsons 1939: 708). Many curing ceremonies involve the ritualistic hunt, capture, and destruction of witches (Hill 1982; Parsons 1929, 1939; White 1962).

Communal curing ceremonies duplicate many of the same procedures as individual curing rituals. At Zia, Leslie White observes that communal curing often takes place near the end of winter or early spring when illness is common and purification of the village is necessary to remove the evil spirits. The "doctors," dressed in the skins of bears, arm themselves with bear claws and flint knives leaving the ceremonial room to fight. If a witch is captured it is returned to the chamber where it is shot with an arrow. Witches are similarly done away with at Santo Domingo, San Felipe, Isleta, and Cochiti (Lummis 1894, [1892] 1989; Parsons 1939; White 1930, 1962). However, Parsons notes that the witches themselves are rag dolls, although the informants refer to them as real (Parsons 1939:728; White 1930, 1962). Communal curing at Isleta also involves the execution of a witch. The witch is shot with a bow and arrow to weaken it. Then, the ceremonial leader will take the stone knife from the altar and stab the witch. The body is then carried outside and burned where the witch spirit dies (Parsons 1932, 1939:728-730).

Witch Destruction and Bear Societies at Santa Clara Pueblo

Descriptions of the curing rituals of the Bear societies of Santa Clara provide particularly important details concerning witch destruction. Like the Bow priesthood for the Zuni, the Bear societies were the "front line" of defense against witchcraft (Hill 1982:148). At Zia Pueblo and elsewhere, the Flint, Giant, and Fire societies also perform analogous curing rituals (White 1930, 1962); and at Isleta, medicine societies typically combat witches in the guise of bears.

Several curing and purificatory rites involving the ritual slaying of witches are detailed by Hill (1982). Rites could be held in a variety of locations. However, ritual performances were generally held in kivas. A variety of paraphernalia was used by Bear ceremonialists, including a medicine bundle, a carved bear effigy, and, for male members of the society, a costume with bear-paw gauntlets with the claws attached. Women members dressed in black and in their right hand carried "a long, unchipped obsidian blade . . . used in the witch chase, and for cutting up witches." In their left hand, they carried a large, chipped obsidian spear point, or tsi wi (Hill 1982:329)."

Jeançon (quoted in Hill) describes the dramatic slaying of the witches as part of a curing rite:

The men growled like bears, clawed the air about the patient, pretended to grasp the witches; the women also imitated the growls of the bears, flourished the cutting edges and stabbed with the spear heads, to cut and rend the evil influences... they rushed up the ladder to the roof, screaming and shouting, and pretended to frighten the evils away. They descended into the plaza and sought out those impersonating the witches, struck them, and pretended to cut and destroy them. . . . This was continued until all the evil ones were killed or driven off. The impersonators of the witches divested themselves of their rags and returned to the kiva. Then all of them, headed by the leader, rushed to Santa Clara Creek. . . . When they reached the water, they all plunged in to wash off the disease and evil influences. [Hill 1982:329–330]

A similar rite recorded by Hill (1982) as "Large Treatment" was held annually and emphasized purification and preventive medicine. Also performed by the Bear Society, purification of the community involved the capture of witches at six distant shrines who were then "placed" into the "bundle" of the carrier. These were then left with the war captains until the fourth and final night of the ceremony, when purification and final execution of the witches would take place in the kiva. The battle would consist of a search by the head of the Bear Society to locate and discover the "cacique of the witches" referred to as "the heart." Once found, a pursuit would ensue, leading to a long struggle and its eventual capture. Returning, the hunting party would be heard at the hatchway of the kiva, and the witch would cry out as it was taken inside.

Upon entering the kiva, the witch is transformed (as described by one of Hill's informants):

They shrink as they are brought in. When they reach the floor of the kiva, they were figures about a foot high. They had long hair, were dressed in buckskin, and looked like men. Some were stuffed with bark; others, with feathers or hay. Once when grasshoppers were numerous in the fields and ruining the crops, all the witches collected at the "large treatment" contained these. [Hill 1982:335]

The witch's "heart" was then examined. It was struck by all the Bears present and subsequently placed on an accumulated pile of "evil," including other evil objects that had been assembled. Then, "the heart" was cut up "piece by piece" with a reddish stone knife. This is similarly performed on the "evil." Each part is examined carefully and some parts are retained while others are thrown in the fire. Finally, all that remains of the witch leader is a piece referred to as "the object." "The object" and the remains of the witch are burned by a female member of the Bear Society who places the evil in a bowl filled with hot coals. The ash remains of the witch are mixed with sacred water, some of which is drunk by the war captain and rubbed on his body (Hill 1982:330–336).

The Metaphorical Dismemberment of Witches

As described in the above examples, witch destruction through execution and even dismemberment is necessary in Pueblo attempts to control and rid society of the incarnation of evil and ill health in the community. From a native viewpoint this serves to prevent illness and death as well as plagues, drought, and communal disharmony. Elements of the "Large Treatment" including the "witch hunt" and capture, followed by the striking of the "heart" by the Bear Society, are an enactment of witch interrogation and torture. So, too, the final dismemberment of the witch leader is a metaphor for the actual dismemberment of individuals shown to be witches.

From the perspective of those involved, witches are killed and evil is destroyed. Furthermore, the metaphorical destruction of witches also provides a potential model for human dismemberment and burning identifiable in the archaeological record. In all respects, physical trauma, execution, dismemberment, cutting, defleshing, and burning of selected parts of the body are enacted by the Bear Society on effigies. These may correspond to the operations described by White (1992) and others for observed osteological remains if one substitutes a human body for the witch effigy. That the procedures used for killing witches in curing ceremonies include living beings (and not effigies exclusively) is demonstrated in an Isleta artist's depiction of the ritual killing of a burro for attacking a child in the early 1940s (Figure 3). In this case, procedures corresponding to witch execution include "marking" the burro's joints with an arrowpoint and systematic dismemberment of the burro with an ax by members of the medicine society in the presence of the victim (Goldfrank 1967:194–195).

An important resemblance between execution procedures and the osteological evidence described by White (1992) is the protracted process involved in reducing the corpse. This has been characterized by some as a measure of violence imparted on the victims (Malville 1989). However, the literal dismantling of the witch's body is consistent with a logic or procedure for witch destruction. Witches are constituted primarily by their evil spirit or "bad heart." This proves to be more difficult to locate and destroy. Thus, the witch is systematically dismembered and examined to ensure that the evil is identified and



Figure 3. Isleta watercolors circa 1940 illustrating the assault of a child by a burro (top) followed by the burro's subsequent execution as a witch by members of the medicine society. Courtesy of the American Philosophical Society.

burned. Unlike other spirits, the soul of a witch will not be allowed into the underworld, and instead, as described for the Hopi, the spirit may follow a different course to its final punishment where it is also burned (Simmons 1942: 125–126; 435–436). Even after its body is destroyed, the witch's spirit may remain a malevolent presence among the living (Goldfrank 1967:104–105; Ortiz 1969:140). It may possess another individual, or it may be reborn to

again plague the community. The destruction of the body effectively prevents the witch's return by making the corpse useless to the evil spirit or other witches. Finally, burning contributes and, at times, may be essential to the ultimate destruction of the "evil heart."

Ashes and Arrowheads

The particular tools and products of Large Treatments demonstrate the material requirements and results of ceremonies directed against witches which may ultimately appear in archaeological contexts. Burning and, in particular, the products of burning or ashes are important features of Pueblo ceremony and curing rites. Burning both exorcises and purifies, and, therefore, its products are effective in safeguarding against danger of almost any kind (Parsons 1939; R. I. Ford, personal communication). Thus, ashes are a sensible prophylaxis against evil spirits and witches. Ashes are often rubbed on infants for protection as well as on patients or curers involved in witch pursuits. At Cochiti the walls of death-tainted rooms were brushed down with ashes in order to purify them (Parsons 1939:106-107, 463-464, 711), and, as an Isletan informant to Parsons notes, the dead were traditionally buried in an ash pile before the introduction of cemeteries (Goldfrank 1967:172; Parsons 1929:432).

Arrowheads also provide protection and strength. Arrowheads have power analogous to fire because they are "shot" with the spirit of lightning, which is a source of power and heat (Parsons 1939). Like ashes, large flint knives or obsidian bifaces are used against witches or evil spirits for keeping them away or in rituals to destroy them (Goldfrank 1967:65). Also like ashes, they are used in similar contexts, in curing ceremonies and in burials. At Isleta, by marking around graves with an arrowpoint, the dead are protected from marauding witches who rob the dead and steal corpses. At Laguna and Isleta, women will tie arrowpoints to their belts to protect themselves from witches before going out at night (Parsons 1939:106).

Zuni Witch Trials

The historical accounts of witch dealings at Zuni are well known, and, like a case history, they provide important details concerning the procedures of witch identification and killing relevant to prehistoric execution. The history of witch killing at Zuni has been summarized by Simmons (1974), beginning as early as the sixteenth century with the slaying of the Spanish or Moorish "slave," Esteban. However, Smith and Roberts (1954) provide a more systematic account in their classic study of Zuni law with summaries of 18 individual cases of witch trials from the 1890s to 1925. Although some cases are anecdotal, many are corroborated by supporting evidence including accounts detailing attempts by U.S. officials and anthro-

pologists to suppress the practice of witch torture and execution. In 1897, this included the arrests of ceremonialists conducting interrogations.

Each of the cases provided by Smith and Roberts will not be summarized here but, instead, are presented as a tabulated summary of specific characteristics from the 18 accounts (documenting a total of 22 separate trials, Table 3).12 Although the individual cases are referred to as "trials," the term is a misnomer and a reflection of observer bias. As previously noted, the process of examination and punishment, commonly referred to as a trial, may duplicate the more esoteric rituals involved in ceremonies of curing to rid the community of witches. The following discussion will review several general aspects of the Zuni cases including the cross-examination, its location, the confession, the frequency and method of execution, the individuals executed, and the disposal of the body or bodies. Each of these aspects has a general and a specific relevance to identifying behaviors related to material expressions in the archaeological record.

1. Cross-Examination

Treatment of an accused Zuni witch could include interrogation and torture of the accused to elicit a confession, followed by punishment and possible execution. The prosecution or cross-examination of accused witches was exclusively the duty of the Bow Priesthood and was not the jurisdiction of the Zuni Council empowered with most other judicial matters. The method of interrogation could involve "hanging" of the accused from a horizontal bar in the plaza by the feet, thumbs, or arms which were tied behind his/her back (see Figure 4; Cushing 1979; Smith and Roberts 1954:38) as well as beatings with clubs and verbal abuse during or after hanging to obtain confessions. 13 The accounts suggest that each individual was "treated" separately, although confessions and additional accusations could escalate the trial of a single witch into a more generalized witch hunt.

At various times during the interrogation, the accused might be let down briefly to talk or to go to their houses (accompanied by an official) to collect a witch bundle or other objects used to perform witchcraft. These would then be turned over to the Bow priests. In other cases of bewitchment, as part of the curing ceremony the accused might also be interrogated in the presence of the victim in his or her home (Case 3a).

Witches were accused of a wide variety of crimes, including bewitchment, drought, crop destruction, heresy, plagues, epidemics, and murder. Interestingly, none of the bewitchment cases ended in execution. However, for the five trials that resulted in deaths, the crimes could include any number of the other possible crimes listed. Numerous additional crimes and/or murders were often admitted by the accused, often as part of a confession.

Table 3. Tabulated summary of 22 Zuni witch trials (Smith and Roberts 1954).

		Witch			Trial	Interrogation	Additional
Case	Date	sex	Age	Crime	location	method	crimes
1	ca.1880	M	Old	Drought	Hill	Hanging	
2	ca.1880	M	?	Drought, wind		0 0	
3a	"Long Ago"	M	Old	Bewitchment	House of victim	Clubbing	
3b	"Long Ago"	M	O ld	Murder	Traditional place	Hanging, clubbing	
4	ca.1880	M	?	Sickness	Victim's presence		
5a	ca.1880	M	?	Bewitchment	Victim's presence	Questioning	
5b	ca.1880	M	?	Bewitchment	Public plaza	Questioning	Drought
6	ca.1880	M	"Middle aged"	Drought, fires	•	Clubbing	Epidemics
7	1880	M	Old	Crop destruction		Hanging	•
8	ca.1880	M	?	Grave robbery, murder		.	
9	?	M	?	Heresy			
10a	1885	M	Old	Grave robbery	Old church	Hanging, clubbing	Murder
10b	1885	F	?	Animal transformation	Plaza		
11	1897	M/F	?/Old	Plague		Hanging	
12	ca.1890	M/F	Young/old	Sickness	Traditional place	Hanging, clubbing	Murder, grave robbery
13	1891	M	?	Bewitchment	Church	Hanging, beating	
14	1897	F	?			Hanging	
15	"Long Ago"	M	?		Kiva	Hanging	
16a	1899	M	Young	Killing children	Old church	Hanging	
16b	1899	F	?				Witch knowledge
17	1911	M	?	Epidemic		Interrogation	_
18	ca.1925	M	Young	Epidemic	Public plaza	-	

	Others		Outside intervention	Execution	Method of	Number	Burial
Case	implicated	Sentence			execution	executed	
1		Join a sacred order	Yes	No			
2		Fine, ostracized	Yes	No			
3a		Released	No	No			
3b		Continued beating	No	?			
4		Released	Yes	No			
5a		Released	Yes	No			
5b		Public confession	Yes	No			
6	Family	Death	No	Yes	Clubbing	8	Bodies left to rot
7	•	Released	Yes	?		j	
8		Released	No	No			
9		Death		Yes	Clubbing	1	
10a	Sister	Death	No	Yes	Clubbing	1	Shallow grave in cemetery
10b		Clubbed lightly	No	No			•
11		Death	No	Yes	Stoning	2	
12	Family	Beating, ostracism	No	No			
13	,	Ostracism	Yes	No			
14		Death	Yes	No			
15	Family	Released/ostracized with family	Yes	No			
16a	Mother	Death	No	Yes		1	
16b		Released	No	No			
17		Expulsion from religious society	Yes	No			
18		Hanging but released	Yes	No			

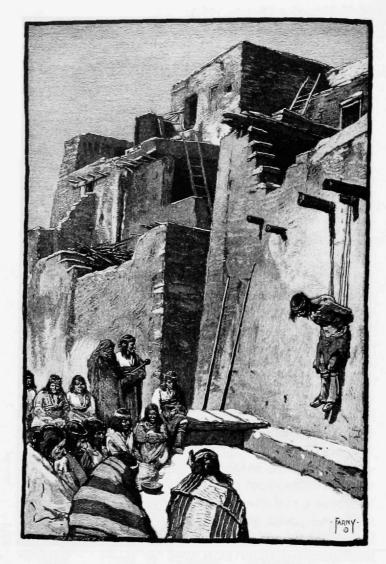


Figure 4. Torturing a sorcerer (from Cushing 1883:44).

2. Location

Little information is given concerning where "trials" were held. Evidently physical chastisement of the witch may have been performed in a variety of locations. Often the site is referred to as the "traditional place" for hanging witches. Other examples locate the "trial" in a public plaza, a hill north of the pueblo, and the old church (see also Tedlock 1988). In one case, the accused is interrogated in a kiva (Case 15), which Cushing (1979:125–126) suggests is the more traditional location. For Case 15, a portion of the cross-examination was held in the kiva, but the actual hanging of the witch was conducted outside.

Certain witch confrontations at Zuni appear to have been conducted in public places. However, Hill (1982) observes for Santa Clara Pueblo that the spirit of the witch is dangerous and, in rites of purification or witch destruction during which an evil spirit may be released or other witches may come to defend it, those not part of the ceremonies traditionally remained in their homes.¹⁴

3. Confession

Confessions can include not only acknowledgment of guilt but also long, detailed descriptions of ritual knowledge, the release of ceremonial bundles or objects, and the implication of others in acts of witchcraft. Detailed accounts of confession are not recorded. In some cases, however, a strong interest on the part of the Bow priesthood in the details of the confession is suggested. This interest is focused less on establishing the guilt of the accused and more on the content of the witch's knowledge, emphasizing that secret knowledge once revealed is no longer powerful. Still, certain cases suggest that such knowledge may have been of interest to the priests for their own edification (Brandt 1980; Whiteley 1987). As a result, an individual's ritual knowledge and willingness to reform their behavior could earn them their release. This is demonstrated in Case 16, in which the individual is spared despite the execution of the accused's son.

It is also clear that one of the primary aims of the Bow priest is to identify other witches since the offenses of the accused are known but were probably performed in league with a witch society. Elaborate confessions included the identification of other witches. In the four cases in which others are implicated as part of the confession (Cases 6, 10, 12, 16), they are members of the accused's family. In Case 6, this resulted in not only the execution of the accused but of seven additional family members.

4. Frequency and Method of Execution

Accused witches were executed in 6 out of the total 22 "trials" presented by Smith and Roberts. Fifteen "trials" ended with sentences including ostracism or corporal punishment. In 11 cases, intervention by anthropologists, Indian agents and soldiers, or teachers influenced the final decision by the Bow priest and the accused was released. However, in Case 7 the circumstances of the individual's death after the trial are unknown, and as comments by anthropologists present suggest, a number of the other 10 cases would have probably ended in death without their intervention (cited in Smith and Roberts 1954).

The method of execution is typically clubbing and occasional stoning. In one case, a war club was used (Case 9). A portion of the victim's flesh is attached to the club and the club is never used again (Smith and Roberts 1954:43). In some instances it is apparent that the individual expires from the prolonged torture and bludgeoning as part of the interrogation (Case 12).

5. Age and Sex Distribution

Witch accusations leading to actual confrontations seem to favor males over females at Zuni. Of the 24 individuals identified by sex for the 22 cases, 19 males and 5 females were accused of witchcraft. Of the 14 deaths resulting from

formal execution, only 1 is identified as female (Case 11). Of the remaining 13 individuals, 6 are clearly male. However, for the multiple execution in Case 6, the 7 individuals of the accused family who are executed are not described.

In the subset of cases ending in execution, it is not possible to distinguish whether there is a trend toward execution of more males over females. For individuals whose sex is identified, 1 out of 5 females (20%) and 6 out of 19 males (32%) are executed. In the two cases of multiple execution, representation of both sexes is likely.

Age structure is similarly inconclusive with respect to the Zuni data. However, age groups including old, middle aged, and young of both sexes (as described) are present in the Zuni sample. Two trends may be seen to occur. First, in the event of a multiple execution, the age and sex of the victims may replicate, in part, the expected ages and sexes of a Zuni family group. This excludes any others who might also be implicated and are executed as well.

Second, paired executions and their remains may exhibit age and sex differences that suggest a parent-child relationship, specifically mother-son or grandmother-grandchild (see Cases 11 and 12). It seems less likely that wives or husbands married into the witch family would be executed with them, since they may be the accusers.

There is no mention of infants in the Zuni data, and the threat of infants born into witch families is not described in the ethnographic literature. As indicated above, witch power is both passed through the family as well as learned. Therefore, infants may pose some threat, but it is not evident that they would be included in an attack on a family suspected of witchcraft (see Pellizzi 1968:86–87).

6. Relationship of Individual(s) Executed and Frequency of Multiple Executions

In all cases, the "trial" focused on an individual witch. Others implicated by the witch's testimony would then come under scrutiny. Of the 5 cases that ended in execution, only 2 were multiple executions: Case 6, ending in the deaths of eight family members, and Case 11, in which a mother and her son were killed. For Cases 10 and 16, the final death sentence for the accused was not extended to the family members implicated. In Case 10, the sister of the accused was released after a light beating. In Case 16, the mother of the accused was released after a particularly impressive testimony.

A review of these accounts suggests that in instances of multiple execution it is common to find a high degree of relatedness among the victims. This is consistent with trends in membership of Pueblo ceremonial societies and beliefs about the transmission of knowledge of witchcraft and powers from blood kin, particularly the mother or grandmother (Fox 1967:265).

7. Disposal of the Body or Bodies

Very few of the accounts assembled by Smith and Roberts provide details of the manner in which the bodies are disposed. This suggests either that disposal was not rigidly defined or that the manner of disposal was not widely known and may have been the specific duty of the Bow Priesthood. Cushing (1979:127) supports the latter possibility, indicating that the leader and executioner for the Bow priests would dispose of the body secretly with the aid of the other members. Details concerning disposal of the body or bodies are provided for only two of the cases reviewed here. For Case 6, rather than being buried, the bodies of the eight victims were taken out of the pueblo and left to "rot" in the open (Smith and Roberts 1954:41–42). The victim in Case 10 was buried in a shallow grave in the cemetery.

Postmortem treatment and disposal of the executed may also vary according to the context in which the execution takes place. Thus, the crime or perceived threat of the witch may have an influence on both sentencing and manner of treatment and disposal of the body. More elaborate procedures are hinted at by Cushing. However, with increased Anglo-American presence at Zuni, particularly of anthropologists who interfered in witch trials, postmortem destruction of the corpse of a witch may have taken place in secret, or not at all.

Despite the small sample, the Zuni witch trials compiled by Smith and Roberts are revealing with respect to trends and behaviors related to the treatment of witches at a single community in the late nineteenth and early twentieth centuries. Similarities in other Pueblo communities suggest that these trends may be extended to them as well. One clear implication from the Zuni sample is that execution was used only as a last resort and that multiple or mass execution was an extreme and even less common response to the threat of witches. Acculturative effects due to contacts with Western society, both American and Spanish, warrant careful examination. However, it is worth noting one important contrast. Unlike early modern European witch persecution which emphasized marginal, older females (Lamer 1981:89-102, 1984:84-88; MacFarlane 1970:230-231; Pellizzi 1968:86), Pueblo accusations of witchcraft may have tended to be directed toward males of higher social standing or reputation (Whiteley 1987).

Pueblo Witch Execution: An Alternative Explanatory Model

Isolating specific variables relevant to a model of witch execution and its expression archaeologically is a key problem. Ideally, we are searching for a model of Pueblo behavior which relates the archaeological evidence for human bone modification and mass inhumation to relevant, inferred behaviors among the Anasazi. Figure 5 is an

attempt to illustrate the relationship of behaviors involved in the identification and treatment of witches to the archaeological record in which the material remains are generally found. It is evident that no single model for witch execution can encompass the specific behaviors of every Pueblo community or the broad range of behaviors associated with the control of witches. Furthermore, it would be unrealistic to expect that a single model should explain all occurrences of mass inhumation or modified human bone. Nevertheless, the aim here is not to eliminate cannibalism or other models, but to distinguish "witch execution" from "cannibalism" as an explanation for the patterns of bone breakage identified in studies by T. White and others and to explore and contrast their effectiveness. The previous review of native concepts of cannibalism and witchcraft casts significant doubt on previous interpretations of Anasazi mass inhumations (e.g., Turner 1983; White 1992). Thus, archaeological evidence previously classified as examples of prehistoric "cannibalism" needs to be reexamined.

Archaeological Correlates

The following list of variables includes those aspects of witch execution and dismemberment which might be observed in an archaeological context. These are not drawn solely from a review of ethnographic and ethnohistoric literature but represent a conscious effort to make sense of the archaeological remains with available data on Pueblo

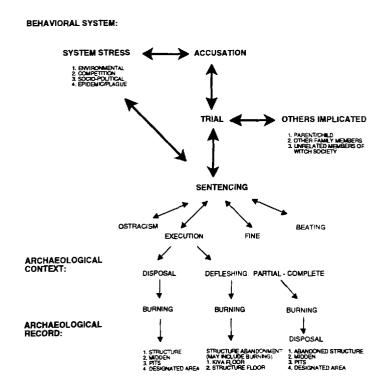


Figure 5. A witch execution model illustrating linkages among the behavioral system, the archaeological context, and the archaeological record.

society and culture. These variables include context, artifacts, burning, osteological remains, age and sex structure, relatedness of victims, and timing.

1. Context

Identification of prehistoric witch execution in the Southwest requires careful consideration of the archaeological and systemic context in which the human remains are found. Specifically, this accounts for the relationship of the archaeological artifacts both temporally and spatially and the behavioral system that may have produced them. In the case of human bone modification and mass inhumation resulting from witch execution, two possible contexts may be recognized: defleshing and disposal.

Defleshing: As in cases involving nonhuman animals, one would expect actual butchering sites in which the total range of refuse including all animal bone and other remains occur together, in situ, to be less common than disposal sites. This may also be true for Anasazi executions. However, the destruction of a witch or witches, unlike butchering an animal for food, may extend beyond the body of the witch to associated materials and even structures. The act of defleshing and burning to destroy the witch is an end in itself. Yet, depending on the conditions of the execution, the human remains and associated materials may or may not be found together where the execution took place. A witch execution site may be defined as a location containing human bone with evidence of cutting, defleshing, dismemberment, and possible burning which is located in the same place where the activity took place. This will be contrasted with contexts of disposal below. Except for other contextual variables that may affect the artifact assemblage including taphonomy, artifacts associated with the bone deposit are the result of the behaviors associated with the processing of a corpse and the execution ceremony.

Accounts detailing the actual defleshing of a witch are practically nonexistent. However, as described above, this often takes place in kivas, or traditional ritual structures. At Zuni, the witch trial and even the final blow ending the life of a witch may be public; however, the ritualistic destruction of the body was probably not a public ceremony and for this reason is not detailed in oral accounts (Cushing 1979). Lastly, it is recognized that dismemberment may not have been performed in all pueblos at all times. In general, defleshing a witch's corpse, at least in recent decades, would not have been common and does not appear to have always been necessary.

Preservation of defleshing contexts may be limited to kivas that are subsequently abandoned or destroyed as part of the ritual destruction of the accused witches (Wilshusen 1986, 1988). This may reflect a shared ceremonial and/or kin relationship among those executed (Walker

1993). As is indicated in a folktale from Taos (Parsons 1940:54-55) and tales of the destruction of Awatovi, battles with witches often occur in the ceremonial houses of witches including kivas or caves. This is distinct from rituals in which witches are actively captured and returned to a designated place for destruction (as in the Large Treatments at Santa Clara). This variability may also be reflected in the archaeological record.

In general, witch execution may mark the hasty closure of kivas, protokivas, or other structures (Luebben 1982; Luebben and Nickens 1982; Malville 1989; Ogilvie and Hilton 1994; Reed 1953; Walker 1993; Wilshusen 1986). Abandonment may include destruction of the structure including burning or filling-in, if it is subterranean. For example, Wilshusen (1986) has suggested that possible witch internments in a Pueblo I protokiva in the Dolores River Valley of southwestern Colorado involved the placement of bodies on the floor followed by the intentional collapse of the roof. In the Yellow Jacket case (5MT3), a kiva, which was the execution site, first had its roof removed, exposing the remains to view, and then was rapidly filled and replaced by a later kiva partially built into it (Figure 6). In a possible case at the site of Te'ewi in the Chama Valley, New Mexico, the kiva was burned (refer to Reed 1953 for a different interpretation), leaving a deposit of burned roof material, posts, and other remains on the floor in contact with the execution remains.

Disposal: A disposal context refers to all other possible deposits containing cut and broken human bone resulting from an execution which have been removed or collected from a defleshing location and redeposited. Such accumulations are refuse or final disposal of the remains from an execution ceremony. These may include other material in addition to the bone including associated artifacts, ash and charcoal, and so on. As ceremonial trash, disposal may depend on social norms concerning the perceived threat or the significance of the material. This may include the systematic retention or removal of certain objects as amulets or even a quantity of ash for use in future ceremonies. The cut and burned human remains will no longer retain direct associations with the behaviors that modified them. In the act of disposal, the assemblages may become mixed with other materials. Depending on the context of the event, both disposal and butchering may be encountered in the same site or sites in close proximity to each other.

In Anasazi sites, trash fill may occur in pits, abandoned structures, and middens. The disposed remains of possible witches seem to appear in all these contexts, suggesting that disposal may conform to generalized patterns (for an example of disposal in an abandoned storage pit see Swedlund 1966). In cases of disposal in structures, there is the possibility of misinterpreting these as execution sites. Absence of artifacts associated with defleshing contexts

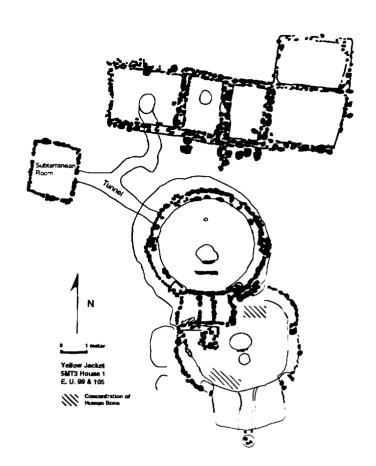


Figure 6. The Yellow Jacket (5MT3) kiva in which the cut and burned remains of ten individuals, males and females, juvenile to adult, were found in association with burned refuse, bifacial knife fragments, and spalls from a polished ax.

as well as the loss or absence of small component bones, including splinters or fragments, due to transport may be expected. Occasionally structures or special places may be dedicated to the disposal of witch remains. For example, in the Sambrito Village case (refer to Dittert et al. 1966), one may speculate that certain previously abandoned pit structures may have witnessed several isolated depositional events resulting in concentrations of human bone at different levels in the structure fill above the floor. Finally, as previously noted, the Polacca Wash site in northeastern Arizona, given its potential association with the destruction of Awatovi Pueblo, may have also been located in an area dedicated to the execution and disposal of witches (Fewkes 1893, 1898; Turner and Morris 1970).

2. Artifacts

Floor artifacts in defleshing contexts may be tied to the act of dismemberment and may include heavy mauls, axes, groundstone, chipped stone, and blades, as well as spalls or flakes from sharpening or use. Small splinters of bone, which might be lost in a disposal context, would be present. Their distribution on the structure floor may be indicative of processing areas or specific operations

involved in the processing of the corpse. At Yellow Jacket (5MT3), an Anasazi site in southwestern Colorado, broken and shattered splinters of human bone in association with large hammerstones and bifacial blade fragments were found on the floor of a kiva and provide an important example of a probable execution site. 16,17

Other artifacts may include the remains of items used in the associated ritual including ceramic vessels, as well as an abundance of ash associated not only with the burning of the corpse but the incineration of the witch's medicine bundle or other objects. Incomplete destruction of these items, in particular, may provide significant clues to the identification of executions, their context, as well as distinguishing them from other contexts involving human bone.

3. Burning

Burning has been shown to be a common element of the ritual destruction of witches. Ashes are also instrumental in ceremonial protection and purification. As previously pointed out, structure abandonment may include burning. In cases of mass inhumation, human bone may exhibit patterned burning often indicative of heat treatment with flesh still present (Turner and Morris 1970; White 1992).

For White (1992:10, 339), burning is one key element in the overall pattern of bone surface modification essential to the recognition of cannibalism. However, burning is also part of the process of witch destruction, exorcism, and purification. In well-preserved cases such as Burnt Mesa (Flinn et al. 1976) and Yellow Jacket (5MT3), other items, including bundles or associated "evil," may also have been incinerated if one accepts the witch execution interpretation. As evidence at these sites, the bone assemblage appears to be mixed with an ashy midden deposit located to one side or over the central firepit of the internment structure.

4. Osteological Remains

The osteological component of Anasazi mass inhumations has been the focus of previous studies of cannibalism at the expense of all other kinds of data relevant to their explanation. White's study of 5MTUMR-2346 (1992) is the most complete and detailed. He concludes from his observations that patterns of surface modification and bone element representation are consistent with the "extraction of nutrition." Accepting this assumption, he presents an argument for cannibalism.

This assumption relies on a necessary and specific relationship between surface modification and consumption. The pattern of bone modification is irrefutable. However, the variety of modifications noted by White and others, including cut marks, percussion, damage, fracture, and burning, are also consistent with behaviors associated

with the protracted execution, dismemberment, and disposal of witches. Representation, preservation, and location reflect contexts of defleshing or disposal as described above. In addition, it has been noted in numerous studies that the bone is typically well preserved in comparison to other human burials. This may be a by-product of the extensive processing and defleshing which may lead to improved preservation (Baker 1990; Malville 1989; Nickens 1975; Turner 1983; White 1992). Pot polish has been emphasized as particularly convincing evidence for cooking or more specifically, boiling. However, despite certain success at replicating pot polish in the laboratory, its explanation remains tentative and its presence or absence alone is inconclusive in the determination of whether cannibalism ever took place (Bahn 1992; Villa 1992; White 1992: 120-124, 323-325).

As White emphasizes in his study, overall patterns of defleshing and bone element representation versus simple trait presence or absence are essential to the identification of anthropophagy in the archaeological record. This is also true for detecting witch execution. Witch slaying and corpse disposal could involve a broad range of perimortem treatments. This may reflect the crime and the perceived threat of the witch and its remains. Thus, limited trauma to extensive mutilation and dismemberment could occur. However, archaeological recognition up to now may have been limited to only one extreme of this behavior or, specifically, those sites that display the most obvious and highly modified human bone.

5. Age and Sex Structure

A number of possible trends were identified in the review of data from the Zuni witch trials in the late nineteenth and early twentieth centuries. In those cases of multiple executions, there is a tendency for both males and females, and adults and subadults, to be represented. Although a greater number of males at Zuni may have been executed for witchcraft overall, for the subset of females, older women may be more commonly accused and executed for witchcraft. Infants do not appear in accounts of witch accusation and execution.

White's review of 19 archaeological cases is consistent with these observations. In 16 cases involving multiple individuals, both juveniles (less than 12 years old) and adults were present. In the 7 assemblages with more than two individuals for which sex could be determined, both adult males and females were identified (White 1992:348). Infants are rare but do occur in 2 cases cited by White.

6. Relatedness of Victims

As indicated previously, there is a general Pueblo belief that witchcraft is inherited and that knowledge of witchcraft is passed among family members. This reflects patterns of membership in religious societies and Pueblo concepts of heredity. In accounts or tales of multiple witch execution, a high degree of relatedness is common. The age and sex structure may be indicative of at least a portion of a recognizable family group. In the review of Zuni witch trial data, it was observed that parent-child or grand-parent-grandchild pairs may characterize assemblages of more than one individual. Likewise at Cochiti, Fox (1967:265) notes that witch accusations are equally indictments of the matrilineal kin of the accused.

The archaeological evidence is less informative. At Polacca Wash, Turner and Morris suggest that the age and sex composition resembles a large migrating extended family or clan(s), although infants and juveniles are slightly underrepresented (Baker 1990:163; Turner and Morris 1970:320). Nass and Bellantoni (1982) also conclude that the demographic composition of many of the human bone assemblages dating from Late Pueblo II/Early Pueblo III represent family groups (White 1992:356).¹⁸

7. Timing

In assessing the timing of these assemblages, or specifically when and where they occur, one must consider their ultimate cause. As pointed out, a wide variety of ultimate and proximate causes may bring about an increase in witch accusations and execution, and the specific causes of witchcraft accusations may vary on a case to case basis. Certainly a key source of stress in Pueblo society was drought and/or famine due to crop failures or food shortages. These may, in turn, lead to other more immediate sources of friction in Pueblo communities. Both politically and economically based competition shaped by a network of kin relationships might also contribute to community disharmony, increased witch scapegoating, or competition through witchcraft accusation.

Alternative Explanation

This study has proposed an alternative explanation for prehistoric human bone modification in Southwestern Puebloan societies based on ethnographic and ethnohistoric evidence of witch execution and dismemberment. While it will not account for all aspects of every archaeological case, the argument presents a number of general observations based on Pueblo ethnohistory and ethnology which may be similar to prehistoric behaviors. This in no way presupposes that Pueblo cultures have remained static, nor is this an example of the tyranny of the ethnographic record (see White 1992:19; Wobst 1978). Rather, the argument provides a more robust explanation for the material evidence in relation to our knowledge of Pueblo behavior both archaeologically and in the ethnographic

present. This explanation requires a comprehensive reanalysis of archaeological cases previously linked to cannibalistic behavior. As noted, the bulk of available literature on human dismemberment in Anasazi sites presents an osteological bias, placing the burden of interpretation on physical anthropologists with very little input from cultural anthropologists or archaeologists. In either case, both the cannibalism and witchcraft arguments require a more thorough consideration of the context in which the human bone is found and, more importantly, analysis of the associated artifacts (White 1992).

Violence, Cannibalism, and the Witch Execution Model

A good methodology must be uncompromising. Only then is the quality of the results referable to the quality of the methodology.... When a methodology is the basis for statements about the past, it is possible to research the methodology itself and to uncover its weaknesses and perfect its strengths. [Binford 1981:294]

Most scholars agree with White (1992) and Turner (1983) that extensive perimortem damage to the human remains discussed in this paper has occurred, and this seems indisputable. Still, to what can we attribute this phenomenon? Cannibalism is one explanation for occurrences of human perimortem defleshing in the Pueblo and Anasazi Southwest. However, the osteological evidence is insufficient to show that the flesh was eaten. As White proposes, a comparative analysis of human to animal butchering indicates that defleshing took place, but he infers that the intent was preparation of flesh and bone for consumption. Yet, contextual, artifactual, and culture historical evidence, including ethnographic data, does not support the cannibalism argument. As suggested by Sanday (1986) and others, the practice of cannibalism (ritual or dietary) will be predicated on social norms and beliefs of the cultural system as a whole. These should, in turn, be manifested behaviorally and materially, and not solely in the human remains (Walker 1993). The data presented here suggest a different explanation.

Pueblo witchcraft awaits further detailed consideration. Variability in Pueblo beliefs about witches and their material expression over time and geographic space have not been sufficiently discussed. Execution, as a behavior to explain documented archaeological remains, has the advantage of accommodating a broad range of relevant data including human bone. However, it is important to note that as an extreme of "punitive sacrifice" with fairly obvious material implications, there is a significant potential for bias in the archaeological record. Other forms of witch chastisement can, and more commonly do, include ostracism, beatings, and fines. Yet the material expression of these responses may be more difficult to detect or to distinguish from other forms of behavior. Nevertheless, these

responses, in the long run, may be of even greater significance to our understanding of prehistoric and historic Puebloan sociocultural dynamics and their relationship to witchcraft.

Notes

Acknowledgments. My investigations of witchcraft, cannibalism, and their archaeological manifestation began when I was first confronted with a specific case at the Yellow Jacket site (5MT3) in Colorado in 1987. I would like to acknowledge the assistance and support of Dumbarton Oaks, the American Philosophical Society, and the University of Colorado Museum field school in the preparation of this manuscript. Richard I. Ford, Frances Hayashida, Fred Lange, Joyce Marcus, John O'Shea, Jeff Parsons, Francesco Pellizzi, John Verano, Joe Ben Wheat, Tim White, and Milford Wolpoff, among others, provided significant input. Shane Baker, Peter Bullock, Marsha Ogilvie, and William Walker shared their ideas and provided me with their unpublished manuscripts. Finally, I appreciate the comments of Peter Whiteley and three anonymous reviewers. Correspondence may be sent to J. Andrew Darling, executive director, Mexico-North Research Network, 16 de septiembre #402, Colonia Cuauhtémoc, cd. Chihuahua, Chih. 31020, Mexico.

- 1. The murder and subsequent consumption of a close kinsman in Pueblo/Navaho culture conjures images of both a cannibalistic and incestuous act (Sanday 1986).
- 2. There is abundant literature on Pueblo witchcraft and curing. A sample of this literature can be found in Cushing (1979); Fox (1961a, 1967); Hoebel (1952); Parsons (1927, 1939); Simmons (1942); Simmons (1974); Smith and Roberts (1954); and Titiev (1942). Additional perspectives may be found in works of fiction including *Ceremony* (1977) by Leslie Marmon Silko and *The Delight Makers* (1916) by Adolph Bandelier. Witchcraft is a major theme in both novels and like the folktales cited in this paper provide useful insights.
- 3. In the Isleta story, *The Girl Who Was Restored to Life* (Parsons 1929–30:438), a witch wishes to marry a girl who refuses him. The witch society then arranges the girl's death and, after the fourth day when her spirit must leave the community, the witches come to the grave to exhume the body. Once the dead have been raised they are in the power of the witch society or at their mercy.
- 4. Bandelier cites a manuscript, dated 1888, in his possession entitled *Relación de la Matanza de los Brujos de Nambe, por Juan Luján, Testigo Ocular*. Marc Simmons's study similarly makes note of this reference, indicating that the document has disappeared (1974:176). For data on Navajo witch slayings of the same period see Brugge (1977, 1986) and Frisbie (1987).
- 5. Elsie Clews Parsons recognized this as early as 1922, stating: "if Southwestern ruins say anything, long before the advent of the Conquistadores the habit of town splitting must have developed" (in Titiev 1944:98).
- 6. It is unlikely that mass inhumations in the Southwest are the result of witchcraft including cannibalistic feasts. Lewis (1986:72) cautions that accepting the often key conceptual relationship of cannibalism and witchcraft, one should not immediately dismiss witchcraft as a myth or "reality of thought" in the same way as Arens (1979) dismisses cannibalism. This is in-

dicative of the specific bias of the accuser of witchcraft versus the accused.

- 7. Navajo witches were often executed following a form of trial ceremony. The method could include axes or clubs, shooting, or hanging by the neck. Related families or clans were not necessarily imperiled by the determination that a relative was a witch. However, they might be required to make additional payments
- 8. Hill quotes Jeançon on the tsi wi (Hill 1982). See also Jeançon (1923:17-20).
- 9. The elusive quality of the witch spirit is emphasized by the case at Zuni in which the evil heart is hidden in the toenails of the accused (Smith and Roberts 1954:47, Case 15). The witch professes near invincibility, indicating that beatings on the head and body would not cause injury.
- 10. The witch's body is essentially human (Parsons 1939). However, the evil powers of witchcraft enable the witch to transform itself into were-animals, to fly, and to perform other unusual acts. This is similar to ceremonialists who use the supernatural powers of spirits or animals. The members of the Bear Society take on the mannerisms and costumes of bears before engaging witches.
- 11. Esteban made the critical mistake of boasting about his supernatural powers, a strategy that may have proved effective during his peregrinations in northern Mexico with the castaway Cabeza de Vaca but fatal among the Zuni (Simmons 1974).
- 12. For Case 3, one individual is tried twice. For Cases 5, 10, and 16 others implicated by the witch's testimony are also tried or cross-examined. All of these are treated as separate trials although they are part of the same case. In all, the data presented consist of 18 cases and a total of 22 separate trials.
- 13. Similar chastisement as a form of punishment for criminal "defection" at Santa Clara Pueblo is suggestive of witch cross-examination and is described by Hill (1982:149–150).
- 14. Witch hanging has been identified by Goldman and others as a European practice (Smith and Roberts 1954). The acculturative effects of Europeans on Pueblo beliefs about witches and procedures for the treatment of witches have been noted by Boas (1922), Parsons (1927), and Smith and Roberts (1954). These transformations, as well as influences during the Pre-Columbian and postcolonial Mexican and American periods, need further examination.
- 15. See the Zuni folktale collected by Cushing which describes the destruction of Atahsaia, the Cannibal Demon, by the twin war gods, Ahaiyuta and Matsailema. This resembles tales collected by Parsons (1940) at Taos which describe the killing of cannibalistic giants. At Taos the giant is trampled and burned. In the Zuni tale, the demon is skinned. The remainder is then decapitated and disemboweled with a great knife and the parts are then scattered, becoming aspects of the night sky and the underworld. The skin is stuffed with sticks and dry grass by the war twins and the effigy is used to trick their old grandmother. She attempts to kill the effigy with a piñon club (Cushing 1979:401–404; 1986:365–384; compare with Hill's accounts of ceremonial destruction of witch effigies at Santa Clara Pueblo, Hill 1982).
- 16. Blood residue analysis of tools would prove to be very useful in the establishment of their association and use in defleshing activities. One case includes the site LA 83500, in

which a utilized flake tested positive for antihuman serum (Ogilvie and Hilton 1994).

17. In archaeological cases such as at Te'ewi, a mass inhumation site in northwestern New Mexico, and Yellow Jacket, the presence of bifacial blades is suggestive. Numerous axes in the Te'ewi Kiva 1 in association with human remains point to potential processing of the individuals in the structure just prior to its destruction (Wendorf 1953).

18. It is interesting to note that for Nass and Bellantoni (1982) and for White (1992:356), probable relatedness is believed to be contrary to the witchcraft hypothesis. Yet, considering the pattern of witch execution identified in this study, a high degree of relatedness strongly supports a witch execution model.

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